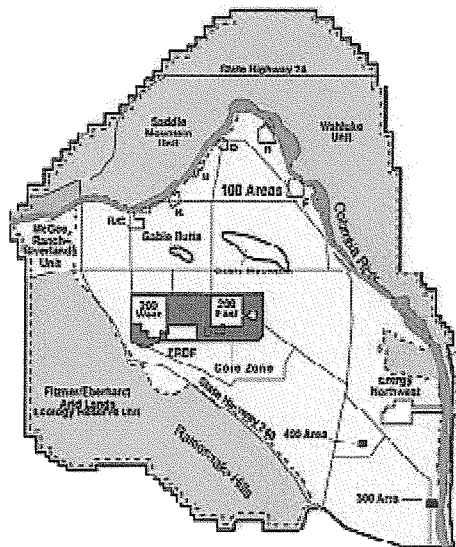




# **Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion Revision 8B**

**For the Treatment, Storage, and Disposal of Dangerous Waste**



**Washington State Department of Ecology  
Nuclear Waste Program**

**August 2006**

Permit Number: WA7890008967

Revision Number: 8B

For additional copies of this permit contact:

Department of Ecology  
3100 Port of Benton Blvd.  
Richland, WA 99354-1670  
(509) 372-7950

*The Department of Ecology is an equal-opportunity agency and does not discriminate on the basis of race, creed, color disability, age, religion, national origin, sex, marital status, disabled-veteran's status, Vietnam-era veteran's status or sexual orientation.*

*For more information or if you have special accommodation needs, please contact the Nuclear Waste Program at (509) 372-7950.*

*Department of Ecology Headquarters telecommunications device for the deaf (TDD) number is:  
(360) 407-6006*

Permit Number: WA7890008967  
Revision Number: 8B

Expiration Date: September 27, 2004

1

# UNIT STATUS TABLE

PERMIT REVISION	REVISION DATE	UNITS INCORPORATED
Permit Revision 0	8/29/94	616 NDWSF, 305-B Storage Facility, 183-H SEB, 300 ASE, 2727-S NRDWSF
Permit Revision 1	4/28/95	Simulated High-Level Waste Slurry T&S Unit, 218-E-9 Borrow Pit Demo Site, 200 W Area Ash Pit Demo Site, 2101-M Pond, 216-B-3 Expansion Ponds
Permit Revision 2	8/29/95	Hanford Patrol Academy Demolition Site, 105-DR Large Sodium Fire Facility, 304 Concretion Facility
Permit Revision 3	11/26/96	4843 Alkali Metal Storage Facility, 3718-F Alkali Metal Treatment & Storage Facility, 303-K Storage Facility, 300 APT
Permit Revision 4	1/28/98	PUREX Storage Tunnels, LERF & 200 Area ETF, 242-A Evaporator, 325 HWTUs
Permit Revision 5	5/18/99	100 D Ponds, 1301-N & 1325-N Liquid Waste Disposal Facilities, 1324-N Surface Impoundment, 1324-NA Percolation Pond
Permit Revision 6	3/28/00	Permit Condition II.Y, Corrective Action
Permit Revision 7	2/27/01	Waste Treatment and Immobilization Plant, 300 Area Waste Acid Treatment System
Permit Revision 8	9/23/04	No new units, modification updates
Permit Revision 8A	3/6/06	Integrated Disposal Facility
Permit Revision 8B		331-C Storage Unit, PFP Treatment Unit, 241-Z treatment & Storage Tanks

UNIT	Permit Revision		Comments/History
	Incorporated	Retired	
PART III, OPERATING UNITS			
616 NDWSF	Rev 0	Rev 7	Clean closed, 9/5/01
242-A Evaporator	Rev 4		
305-B Storage Facility	Rev 0		
325 HWTUs	Rev 4		RLWT procedural closure, 9/04
LERF/200 Area ETF	Rev 4		
PUREX Storage Tunnels	Rev 3		
Waste Treatment and Immobilization Plant	Rev 7		Permitted unit under construction
Integrated Disposal Facility	Rev. 8A		
331-C Storage Unit	Rev. 8B		
PART V, UNDERGOING CLOSURE UNITS			
100-D Ponds	Rev 5	Rev 6	Clean Closed, 8/9/99
105 DR Large Sodium Fire Facility	Rev 2	Rev 6	Clean Closed, 7/1/04
1301-N Liquid Waste Disposal Facility	Rev 5		
1324-N Surface Impoundment	Rev 5		
1324-NA Percolation Pond	Rev 5		
1325-N Liquid Waste Disposal Facility	Rev 5		
200 West Area Ash Pit Demo Site	Rev 1	Rev 6	Clean Closed, 11/28/95
2101-M Pond	Rev 1	Rev 6	Clean Closed, 11/28/95
216-B-3 Expansion Ponds	Rev 1	Rev 6	Clean Closed, 7/31/95
218-E-8 Borrow Demolition Site	Rev 1	Rev 6	Clean Closed, 11/28/95
2727-S Storage Facility	Rev 0	Rev 6	Clean Closed, 7/31/95
300 Area Solvent Evaporator	Rev 0	Rev 6	Clean Closed, 7/31/95
300 Area WATS	Rev 6	Rev 7	Modified Closed, 1/21/05.
303-K Storage Facility	Rev 4	Rev 6	Clean Closed, 7/22/02
304 Concretion Facility	Rev 2	Rev 6	Clean Closed, 1/21/96
311 Tanks	Rev 6	Rev 7	Clean Closed, 5/20/02. 300 Area WATS Part A
3718-F Alkali Metal Treatment /Storage	Rev 3	Rev 6	Clean Closed, 8/4/98
4843 Alkali Metal Storage Facility	Rev 3	Rev 6	Clean Closed, 4/14/97
Hanford Patrol Academy Demo Site	Rev 2	Rev 6	Clean Closed, 11/28/95
Simulated High Level Waste Slurry	Rev 1	Rev 6	Clean Closed, 9/6/95
PFP Treatment Unit (HA-20MB)	Rev. 8B		Clean Closed, 2/8/05.
241-Z Treatment and Storage Tanks	Rev. 8B		
PART VI, POSTCLOSURE UNITS			
183-H Solar Evaporation Basin	Rev 4		
300 Area Process Trenches	Rev 3		
PROCEDURALLY CLOSED			

Permit Number: WA7890008967  
Revision Number: 8B

Expiration Date: September 27, 2004

216-U-12 Crib	N/A	N/A	Closed
221-T Test Facility	N/A	N/A	Closed, 2/22/99
2727-WA SRE Sodium Storage Bldg	N/A	N/A	Closed, 2/22/99
324 Pilot Plant	N/A	N/A	Closed, 6/9/97
332 Storage Facility	N/A	N/A	Closed, 4/21/97
437 MASF	N/A	N/A	Closed, 9/11/03
Biological Treatment Test Facilities	N/A	N/A	Closed, 12/10/96
Physical & Chemical Treatment & Test	N/A	N/A	Closed, 5/13/96
Sodium Storage/Sodium Reaction	N/A	N/A	Closed, 9/17/03
Thermal Treatment Test Facilities	N/A	N/A	Closed, 5/13/96
<b>TO BE INCORPORATED</b>			
1706-KE Waste Treatment System			
207-A South Retention Basin			
216-A-10 Crib			
216-A-29 Ditch			
216-A-36B Crib			
216-A-37-1 Crib			
216-B-3 Main Pond			
216-B-63 Trench			
216-S-10 Pond & Ditch			
222-S Laboratory Complex			
224-T TRUSAF			
241-CX Tank System			
303-M Oxide Facility			
331-C Storage Unit			
600 Area Purgewater Storage and Treatment Facility (Modu Tanks)			
Central Waste Complex (CWC)			
Contact Handled Transuranic Mixed Waste Packaging and Interim Storage Facility			
DST System/204-AR Waste Unloading Station			
Grout Treatment Facility			
Hexone Storage & Treatment Facility			
IHLW Interim Storage/CSB			
LLBG			
NRDWL			
SST System			
T Plant Complex			
WESF			
WRAP Facility			
<b>TRANSITION UNDER TPA SECTION 8 (Will not be incorporated into Permit)</b>			
B Plant Complex			
PUREX Plant			

1  
2

**DANGEROUS WASTE PORTION OF THE  
RESOURCE CONSERVATION AND RECOVERY ACT PERMIT  
FOR THE TREATMENT, STORAGE, AND DISPOSAL OF DANGEROUS WASTE**

Washington State Department of Ecology  
Nuclear Waste Program  
3100 Port of Benton Blvd  
Richland, Washington 99352  
Telephone: (509) 372-7950

Issued in accordance with the applicable provisions of the Hazardous Waste Management Act, Chapter 70.105 RCW, and the regulations promulgated there under in Chapter 173-303 WAC.

**ISSUED TO:**

U.S. Department of Energy  
Richland Operations Office  
(Owner/Operator)  
P.O. Box 550  
Richland, Washington 99352  
Telephone: (509) 376-7395

U.S. Department of Energy  
Office of River Protection  
(Owner/Operator)  
P.O. Box 450  
Richland, Washington 99352  
Telephone: (509) 376-6677

Fluor Hanford, Inc.  
(Co-operator)  
P.O. Box 1000  
Richland, Washington 99352  
Telephone: (509) 372-2886

Bechtel National, Inc.  
(Co-Operator)  
3000 George Washington Way  
Richland, Washington 99352

Washington Closure Hanford LLC  
(Co-operator)  
3070 George Washington Way  
Richland, WA 99352  
(509) 372-9951

CH2M HILL Hanford Group, Inc.  
(Co-operator)  
2440 Stevens Center  
P.O. Box 1500  
Richland, WA 99352  
(509) 373-1677

Pacific Northwest National Laboratory  
(Co-operator)  
P.O. Box 999  
Richland, Washington 99352  
Telephone: (509) 375-6600

This Permit as modified on August 22, 2006, will remain in effect through September 27, 2004, unless revoked and reissued under WAC 173-303-830(3), terminated under WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7).

**ISSUED BY:  
WASHINGTON STATE DEPARTMENT OF ECOLOGY**

\_\_\_\_\_  
Jane Hedges, Manager  
Nuclear Waste Program, Department of Ecology

Date: \_\_\_\_\_

## TABLE OF CONTENTS

1		
2	LIST OF ATTACHMENTS.....	6
3	INTRODUCTION.....	9
4	DEFINITIONS .....	12
5	ACRONYMS .....	15
6	PART I - STANDARD CONDITIONS .....	17
7	I.A EFFECT OF PERMIT .....	17
8	I.B PERSONAL AND PROPERTY RIGHTS.....	18
9	I.C PERMIT ACTIONS.....	18
10	I.D SEVERABILITY .....	18
11	I.E DUTIES AND REQUIREMENTS .....	19
12	I.F SIGNATORY REQUIREMENT .....	24
13	I.G CONFIDENTIAL INFORMATION.....	24
14	I.H DOCUMENTS TO BE MAINTAINED AT FACILITY SITE .....	24
15	PART II - GENERAL FACILITY CONDITIONS .....	26
16	II.A FACILITY CONTINGENCY PLAN .....	26
17	II.B PREPAREDNESS AND PREVENTION.....	26
18	II.C PERSONNEL TRAINING .....	27
19	II.D WASTE ANALYSIS .....	27
20	II.E QUALITY ASSURANCE/QUALITY CONTROL.....	29
21	II.F GROUND WATER AND VADOSE ZONE MONITORING .....	29
22	II.G SITING CRITERIA .....	30
23	II.H RECORDKEEPING AND REPORTING .....	30
24	II.I FACILITY OPERATING RECORD .....	30
25	II.J FACILITY CLOSURE .....	32
26	II.K SOIL/GROUND WATER CLOSURE PERFORMANCE STANDARDS .....	32
27	II.L DESIGN AND OPERATION OF THE FACILITY .....	33
28	II.M SECURITY .....	35
29	II.N RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE.....	35
30	II.O GENERAL INSPECTION REQUIREMENTS .....	35
31	II.P MANIFEST SYSTEM.....	36
32	II.Q ON-SITE TRANSPORTATION .....	36
33	II.R EQUIVALENT MATERIALS .....	37
34	II.S LAND DISPOSAL RESTRICTIONS (LDR).....	37
35	II.T ACCESS AND INFORMATION .....	37
36	II.U MAPPING OF UNDERGROUND PIPING .....	37
37	II.V MARKING OF UNDERGROUND PIPING .....	38
38	II.W OTHER PERMITS AND/OR APPROVALS .....	38
39	II.X SCHEDULE EXTENSIONS .....	39
40	II.Y CORRECTIVE ACTION.....	39
41	II.Z WASTE MINIMIZATION .....	43
42	II.AA AIR EMISSION STANDARDS FOR PROCESS VENTS .....	44
43	II.BB AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS.....	44
44	II.CC AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND	
45	CONTAINERS .....	44

1	PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS .....	45
2	CHAPTER 1.....	45
3	616 Nonradioactive Dangerous Waste Storage Facility (Clean Closed, September 5, 2001) .....	45
4	CHAPTER 2.....	46
5	305-B Storage Facility .....	46
6	CHAPTER 3.....	47
7	PUREX Storage Tunnels.....	47
8	CHAPTER 4.....	48
9	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility.....	48
10	CHAPTER 5.....	49
11	242-A Evaporator .....	49
12	CHAPTER 6.....	50
13	325 Hazardous Waste Treatment Units .....	50
14	CHAPTER 10.....	<u>1</u>
15	Waste Treatment and Immobilization Plant.....	<u>229</u>
16	OPERATING UNIT 11 .....	<u>1</u>
17	Integrated Disposal Facility .....	<u>11</u>
18	OPERATING UNIT 15 UNIT-SPECIFIC CONDITIONS .....	<u>12</u>
19	331-C Storage Unit.....	<u>12</u>
20	PART IV - UNIT SPECIFIC CONDITIONS FOR CORRECTIVE ACTION .....	<u>13</u>
21	CHAPTER 1.....	<u>13</u>
22	100-NR-1 Operable Unit.....	<u>13</u>
23	CHAPTER 2.....	<u>14</u>
24	100-NR-2 Operable Unit.....	<u>14</u>
25	PART V - UNIT-SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE.....	<u>15</u>
26	CHAPTER 1.....	<u>15</u>
27	183-H Solar Evaporation Basins (Superseded by Part VI, Chapter 2) .....	<u>15</u>
28	CHAPTER 2.....	<u>15</u>
29	300 Area Solvent Evaporator (Clean Closed, July 31, 1995) .....	<u>15</u>
30	CHAPTER 3.....	<u>15</u>
31	2727-S Nonradioactive Dangerous Waste Storage Facility (Clean Closed, July 31, 1995).....	<u>15</u>
32	CHAPTER 4.....	<u>15</u>
33	Simulated High Level Waste Slurry Treatment and Storage Unit (Clean Closed, October 23, 1995).....	<u>15</u>
34	CHAPTER 5.....	<u>16</u>
35	218-E-8 Borrow Pit Demolition Site (Clean Closed, November 28, 1995).....	<u>16</u>

1	CHAPTER 6.....	16
2	200 West Area Ash Pit Demolition Site (Clean Closed, November 28, 1995) .....	16
3	CHAPTER 7.....	16
4	2101-M Pond (Clean Closed, November 28, 1995).....	16
5	CHAPTER 8.....	16
6	216-B-3 Expansion Ponds (Clean Closed, July 31, 1995) .....	16
7	CHAPTER 9.....	16
8	Hanford Patrol Academy Demolition Site (Clean Closed, November 28, 1995) .....	16
9	CHAPTER 10.....	17
10	105-DR Large Sodium Fire Facility (Partial Closure Plan Completed, October 1, 1996) .....	17
11	CHAPTER 11.....	17
12	304 Concretion Facility (Clean Closed, January 21, 1996) .....	17
13	CHAPTER 12.....	17
14	4843 Alkali Metal Storage Facility Closure Plan (Clean Closed, April 14, 1997).....	17
15	CHAPTER 13.....	17
16	3718-F Alkali Metal Treatment and Storage Facility Closure Plan (Clean Closed, August 4, 1998).....	17
17	CHAPTER 14.....	18
18	303-K Storage Facility (Clean Closed July 22, 2002) .....	18
19	CHAPTER 15.....	18
20	100 D Ponds (Clean Closed, August 9, 1999) .....	18
21	CHAPTER 16.....	19
22	1325-N Liquid Waste Disposal Facility.....	19
23	CHAPTER 17.....	20
24	1301-N Liquid Waste Disposal Facility.....	20
25	CHAPTER 18.....	21
26	1324-N Surface Impoundment .....	21
27	CHAPTER 19.....	22
28	1324-NA Percolation Pond .....	22
29	CHAPTER 20.....	23
30	300 Area Waste Acid Treatment System (Partial Closure Plan Completed, December 3, 2001) .....	23
31	CLOSURE UNIT 6 .....	24
32	Plutonium Finishing Plant Treatment Unit, Glovebox HA-20 MB (Closed February 8, 2005) .....	24
33	CLOSURE UNIT 7 .....	25
34	241-Z Treatment and Storage Tanks .....	25



1	PART VI - UNIT-SPECIFIC CONDITIONS FOR UNITS IN POST-CLOSURE.....	<u>26</u>
2	CHAPTER 1.....	<u>26</u>
3	300 Area Process Trenches .....	<u>26</u>
4	CHAPTER 2.....	<u>27</u>
5	183-H Solar Evaporation Basins .....	<u>27</u>

## LIST OF ATTACHMENTS

The following listed documents are attached in their entirety. However, only those portions of the attachments specified in Parts I through VI are enforceable conditions of this Permit and subject to the permit modification requirements of Permit Condition I.C.3. Changes to portions of the attachments, which are not subject to the permit modification process, will be addressed in accordance with Permit Conditions I.E.8, I.E.11, I.E.13, I.E.15, through I.E.20, and I.E.22. Ecology has, as deemed necessary, modified specific language in these attachments. These modifications are described in the conditions (Parts I through VI), and thereby supersede the language of the attachment.

- |               |   |
|---------------|---|
| Attachment 1  | Hanford Federal Facility Agreement and Consent Order, (as amended)<br><a href="http://www.hanford.gov/tpa/coverpg.htm">http://www.hanford.gov/tpa/coverpg.htm</a> |
| Attachment 2  | Hanford Facility Legal Description, from Class <sup>1</sup> 1 modification, dated<br>January 7, 1999  |
| Attachment 3  | Permit Applicability Matrix, dated March 2006   |
| Attachment 4  | <i>Hanford Emergency Management Plan</i> , DOE/RL-94-02 Revision 2, as amended and<br>approved modifications  |
| Attachment 5  | Purgewater Management Plan, July 1990   |
| Attachment 6  | Hanford Well Maintenance and Inspection Plan, BHI-01265, Revision 0, May 1999   |
| Attachment 7  | Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and<br>CERCLA, June 1990   |
| Attachment 8  | 616 Nonradioactive Dangerous Waste Storage Facility, retired during Revision 6 of<br>the RCRA Permit  |
| Attachment 9  | 616 Nonradioactive Dangerous Waste Shipping Lists, retired during Revision 6 of<br>the RCRA Permit  |
| Attachment 10 | 616 Nonradioactive Dangerous Waste Facility Description of Procedures, retired<br>during Revision 5 of the RCRA Permit  |
| Attachment 11 | 183-H Solar Evaporation Basins Closure/Post-Closure Plan, retired during<br>Revision 6 of the RCRA Permit   |
| Attachment 12 | Decommissioning Work Plan <i>Concrete Sampling - 183-H Solar Evaporation Basins</i> ,<br>retired during Revision 6 of the RCRA Permit                             |
| Attachment 13 | Decommissioning Work Plan <i>Core Drill Sampling - 183-H Solar Evaporation<br/>Basins (Phase I)</i> , retired during Revision 6 of the RCRA Permit                |
| Attachment 14 | 183-H Solar Evaporation Basins Vadose Zone Sampling Plan, retired during<br>Revision 6 of the RCRA Permit   |
| Attachment 15 | Decommissioning Work Plan <i>Berm Removal for 183-H Solar Evaporation Basins</i> ,<br>retired during Revision 6 of the RCRA Permit                                |
| Attachment 16 | 300 Area Solvent Evaporator Closure Plan, retired during Revision 6 of the RCRA<br>Permit   |

1	Attachment 17	2727-S Nonradioactive Dangerous Waste Storage Facility Closure Plan, retired
2		during Revision 6 of the RCRA Permit
3	Attachment 18	305-B Storage Facility, and approved modifications
4	Attachment 19	Simulated High-Level Waste Slurry TSD Closure Plan, retired during Revision 6 of
5		the RCRA Permit
6	Attachment 20	218-E-8 Borrow Pit Demolition Site Closure Plan, retired during Revision 6 of the
7		RCRA Permit
8	Attachment 21	200 West Ash Pit Demolition Site Closure Plan, retired during Revision 6 of the
9		RCRA Permit
10	Attachment 22	2101-M Pond Closure Plan, retired during Revision 6 of the RCRA Permit
11	Attachment 23	216-B-3 Expansion Ponds Closure Plans, retired during Revision 6 of the RCRA
12		Permit
13	Attachment 24	Hanford Patrol Academy Demolition Sites Closure Plan, retired during Revision 6 of
14		the RCRA Permit
15	Attachment 25	105-DR Large Sodium Fire Facility Closure Plan, retired during Revision 6 of the
16		RCRA Permit
17	Attachment 26	304 Concretion Facility Closure Plan, retired during Revision 6 of the RCRA Permit
18	Attachment 27	Permit Modification Schedule, retired during Revision 6 of the Permit
19	Attachment 28	PUREX Storage Tunnels, and approved modifications
20	Attachment 29	4843 Alkali Metal Storage Facility Closure Plan, retired during Revision 6 of the
21		RCRA Permit
22	Attachment 30	3718-F Alkali Metal Treatment and Storage Facility Closure Plan, retired during
23		Revision 6 of the RCRA Permit
24	Attachment 31	300 Area Process Trenches, and approved modifications
25	Attachment 32	303-K Storage Facility Closure Plan, retired during Revision 6 of the RCRA Permit
26	Attachment 33	Hanford Facility Dangerous Waste Permit Application General Information Portion,
27		DOE/RL-91-28, Revision 7, and approved modifications
28	Attachment 34	Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility, and
29		approved modifications
30	Attachment 35	242-A Evaporator, and approved modifications
31	Attachment 36	325 Hazardous Waste Treatment Units, and approved modifications
32	Attachment 37	183-H Solar Evaporation Basins, and approved modifications

1	Attachment 38	303-K Storage Facility Sampling and Analysis Plan, retired during Revision 6 of the
2		RCRA
3	Attachment 39	Errata Sheet for the 303-K Storage Facility Sampling and Analysis Plan, retired
4		during Revision 6 of the RCRA Permit
5	Attachment 40	100-D Ponds, retired during Revision 6 of the RCRA Permit
6	Attachment 41	1301-N & 1325-N Liquid Waste Disposal Facilities, and approved modifications
7	Attachment 42	1324-N Surface Impoundment & 1324-NAPercolation Pond, and approved
8		modifications
9	Attachment 43	Reserved.
10	Attachment 44	Reserved.
11	Attachment 45	Reserved.
12	Attachment 46	300 Area Waste Acid Treatment System, retired during Revision 6 of the RCRA
13		Permit
14	Attachment 47	100-NR-1 and 100-NR-2 Operable Units, and approved modifications
15	Attachment 48	Engineering Evaluation/Cost Analysis for the 100-N Area Ancillary Facilities and
16		Integration Plan, and approved modifications
17	Attachment 49	Reserved.
18	Attachment 50	Reserved.
19	Attachment 51	Waste Treatment and Immobilization Plant, and approved modifications
20	Attachment 52	Integrated Disposal Facility, and approved modifications

## INTRODUCTION

Where information regarding treatment, management, and disposal of the radioactive source, byproduct material, special nuclear material (as defined by the Atomic Energy Act of 1954, as amended) and/or the radionuclide component of mixed waste has been incorporated into this permit, it is not incorporated for the purpose of regulating the radiation hazards of such components under the authority of this permit or chapter 70.105 RCW.

Pursuant to Chapter 70.105 Revised Code of Washington (RCW), the Hazardous Waste Management Act (HWMA) of 1976, as amended, Chapter 70.105D RCW, the Model Toxics Control Act (MTCA), and regulations promulgated there under by the Washington State Department of Ecology (hereafter called Ecology), codified in Chapter 173-303 Washington Administrative Code (WAC), Dangerous Waste Regulations, a Dangerous Waste Permit is issued to the United States Department of Energy (USDOE) - Richland Operations Office (RL) and Office of River Protection (ORP), [owner/operator], and its contractors, Fluor Hanford, Inc. (FH), [co-operator], Pacific Northwest National Laboratory (PNNL), [co-operator], CH2M HILL Hanford Group, Inc. (CHG), [co-operator], Washington Closure Hanford, LLC (WCH), [co-operator], and Bechtel National, Incorporated (BNI), [co-operator], hereafter called the Permittees, for the treatment, storage, and disposal of dangerous waste at the Hanford Facility.

This Dangerous Waste Permit, issued in conjunction with the United States Environmental Protection Agency's (hereafter called EPA) Hazardous and Solid Waste Amendments Portion of the Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal (TSD) of Hazardous Waste (HSWA Permit), constitutes the RCRA Permit for the Hanford Facility. Use of the term "Permit" within the Dangerous Waste Permit will refer to the Dangerous Waste Permit, while use of the term "Permit" within the HSWA Permit, will refer to the HSWA Permit. Use of the same term in both the Dangerous Waste Permit and the HSWA Permit, will have the standard meaning associated with the activities addressed by the permit in which the term is used. Such meanings will prevail, except where specifically stated otherwise.

The Permittees will comply with all terms and conditions set forth in this Permit and those portions of the Attachments that have been specifically incorporated into this Permit. When the Permit and the Attachments (except Permit Attachment 1) conflict, the wording of the Permit will prevail. The Permit is intended to be consistent with the terms and conditions of the Hanford Federal Facility Agreement and Consent Order (HFFACO, Permit Attachment 1). The Permittees will also comply with all applicable state regulations, including Chapter 173-303 WAC.

Applicable state regulations are those which are in effect on the date of issuance, or as specified in subsequent modifications of this Permit. In addition, applicable state regulations include any self-implementing statutory provisions and related regulations which, according to the requirements of the HWMA, as amended, or other law(s), are automatically applicable to the Permittees' dangerous waste management activities, notwithstanding the conditions of this Permit.

This Permit is based upon the Administrative Record, as required by WAC 173-303-840. The Permittees' failure in the application, or during the Permit issuance process, to fully disclose all relevant facts, or the Permittees' misrepresentation of any relevant facts at any time, will be grounds for the termination or modification of this Permit and/or initiation of an enforcement action, including criminal proceedings. The Permittees will inform Ecology of any deviation from the Permit conditions, or changes in the information on which the application is based, which would affect either the Permittees' ability to comply, or actual compliance with the applicable regulations or the Permit conditions, or which alters any condition of this Permit in any way.

Ecology will enforce all conditions of this Permit for which the State of Washington is authorized, or which are "state-only" provisions (i.e., conditions broader in scope or more stringent than the federal RCRA program). Any challenges of any Permit condition may be appealed in accordance with WAC 173-303-845. In the event that any Permit condition is challenged by any Permittee under WAC 173-303-845, Ecology may stay any such Permit condition as it pertains to all Permittees, in accordance with the same terms of any stay it grants to the challenging Permittee. If such a stay is granted, it will constitute a "stay by the issuing agency" within the meaning of RCW 43.21B.320(1).

This Permit has been developed to allow a step-wise permitting process of the Hanford Facility to ensure the proper implementation of the HFFACO. In order to accomplish this, this Permit consists of six (6) parts.

**Part I, Standard Conditions**, contains conditions which are similar to those appearing in all dangerous waste permits.

**Part II, General Facility Conditions**, combines typical dangerous waste permit conditions with those conditions intended to address issues specific to the Hanford Facility. Where appropriate, the general facility conditions apply to all final status dangerous waste management activities at the Facility. Where appropriate, the general facility conditions also address dangerous waste management activities which may not be directly associated with distinct TSD units, or which may be associated with many TSD units (i.e., spill reporting, training, contingency planning, etc.). Part II also includes conditions that address corrective action at solid waste management units and areas of concern.

**Part III, Unit-Specific Conditions for Operating Units**, contains those Permit requirements that apply to each individual TSD unit operating under final status. Conditions for each TSD unit are found in a chapter dedicated to that TSD unit. These unit-specific chapters contain references to Standard Conditions (Part I) and General Conditions (Part II), as well as additional requirements which are intended to ensure that each TSD unit is operated in an efficient and environmentally protective manner. Additional requirements may also be added when an operating unit ceases operations and undergoes closure.

**Part IV, Unit-Specific Conditions for Corrective Action**, contains those permit requirements which apply to specific RPP units that are undergoing corrective action under the HFFACO. RPP units may include solid waste management units and other areas of concern (i.e., releases that are not at solid waste management units and do not constitute a solid waste management unit) that are undergoing corrective action. For The Comprehensive Environmental Response, Conservation, and Liability Act (CERCLA) and RCRA past practice (RPP) units identified in the HFFACO, the corrective action conditions are structured around continued coordination with, and reliance on, the investigation and cleanup requirements established under the HFFACO. For TSD units identified in the HFFACO, the corrective action conditions contemplate use of closure and post-closure processes to satisfy corrective action.

**Part V, Unit-Specific Conditions for Units Undergoing Closure**, contains those requirements which apply to those specific TSD units, included in this part, that are undergoing closure. In accordance with Section 5.3 of the Action Plan of the HFFACO, all TSD units that undergo closure, irrespective of permit status, will be closed pursuant to the authorized State Dangerous Waste Program in accordance with WAC 173-303-610. Requirements for each TSD unit undergoing closure are found in a chapter dedicated to that TSD unit. These unit-specific chapters contain references to Standard Conditions (Part I) and General Conditions (Part II), as well as additional requirements which are intended to ensure that each TSD unit is closed in an efficient and environmentally protective manner.

1 **Part VI, Unit-Specific Conditions for Units in Post-Closure**, contains those requirements which apply  
2 to those specific units in this part that have completed modified or landfill closure requirements, and now  
3 only need to meet Post-Closure Standards. As set forth in Section 5.3 of the Action Plan of the  
4 HFFACO, certain TSD units will be permitted for post-closure care pursuant to the authorized State  
5 Dangerous Waste Program (173-303 WAC) and the Hazardous and Solid Waste Amendments.  
6 Requirements for each unit undergoing post-closure care are found in a chapter, within this part,  
7 dedicated to that unit. These unit specific chapters may contain references to Standard Conditions  
8 (Part I) and General Conditions (Part II), as well as the unit specific conditions, all of which are intended  
9 to ensure the unit is managed in an efficient, environmentally protective manner.

## DEFINITIONS

Except with respect to those terms specifically defined below, all definitions contained in the HFFACO, May 1989, as amended, and in WAC 173-303-040 and other portions of Chapter 173-303 WAC are hereby incorporated, in their entirety, by reference into this Permit. For terms defined in both Chapter 173-303 WAC and the HFFACO, the definitions contained in Chapter 173-303 WAC will control within this Permit. Nonetheless, this Permit is intended to be consistent with the HFFACO.

Where terms are not defined in the regulations, the Permit, or the HFFACO, a standard dictionary reference, or the generally accepted scientific or industrial meaning of the terms will define the meaning associated with such terms.

As used in this Permit, words in the masculine gender also include the feminine and neuter genders, words in the singular include the plural, and words in the plural include the singular.

The following definitions apply throughout this Permit:

- a. The term "**Area of Concern**" means any area of the Facility where a release of dangerous waste or dangerous constituents has occurred, is occurring, is suspected to have occurred, or threatens to occur.
- b. The term "**Contractor(s)**" means, unless specifically identified otherwise in this Permit, or Attachments, Fluor Hanford, Inc. (FH), Pacific Northwest National Laboratory (PNNL), Washington Closure Hanford LLC (WCH), CH2M HILL Hanford Group, Inc. (CH2), and Bechtel National, Inc. (BNI).
- c. The term "**Critical Systems**" as applied to determining whether a Permit modification is required, means those specific portions of a TSD unit's structure, or equipment, whose failure could lead to the release of dangerous waste into the environment, and/or systems which include processes which treat, transfer, store, or dispose of regulated wastes. A list identifying the critical systems of a specific TSD unit may be developed and included in Part III, V, and/or VI of this Permit. In developing a critical system list, or in the absence of a critical system list, WAC 173-303-830 Modifications will be considered.
- d. The term "**Dangerous Constituent**" means any constituent identified in WAC 173-303-9905 or 40 CFR Part 264 Appendix IX, any constituent which caused a waste to be listed or designated as dangerous under Chapter 173-303 WAC, and any constituents within the meaning of hazardous substance at RCW 70.105D.020(7).
- e. The term "**Dangerous Waste**" means those solid wastes designated under Chapter 173-303 WAC as dangerous or extremely hazardous waste. As used in the Permit, the phrase "dangerous waste" will refer to the full universe of wastes regulated by Chapter 70.105 RCW and Chapter 173-303 WAC (including dangerous waste, hazardous waste, extremely hazardous waste, mixed waste, and acutely hazardous waste).
- f. The term "**Days**" means calendar days, unless specifically identified otherwise. Any submittal, notification, or recordkeeping requirement that would be due, under the Conditions of this Permit, on a Saturday, Sunday, or federal, or state holiday, will be due on the following business day, unless specifically stated otherwise in the Permit.



- 1 g. The term "**Director**" means the Director of the Washington State Department of Ecology, or a  
2 designated representative. The Program Manager of the Nuclear Waste Program (with the address as  
3 specified on page one [1] of this Permit) is a duly authorized and designated representative of the  
4 Director for purposes of this Permit.
- 5 h. The term "**Ecology**" means the Washington State Department of Ecology (with the address as  
6 specified on page one [1] of this Permit).
- 7 i. The term "**Facility**" means all contiguous land, structures, other appurtenances, and improvements on  
8 the land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of  
9 dangerous waste. The legal and physical description of the Facility is set forth in Permit  
10 Attachment 2.
- 11 j. The term "**Facility**" for the purposes of corrective action under Permit Condition II.Y, means all  
12 contiguous property under the control of the Permittees and all property within the meaning of  
13 "facility" at RCW 70.105D.020(3) as set forth in Permit Attachment 2.
- 14 k. The term "**HFFACO**" means the Hanford Federal Facility Agreement and Consent Order, as  
15 amended (Commonly referred to as Tri-Party Agreement [TPA]).
- 16 l. The term "**Permittees**" means the United States Department of Energy (owner/operator), Fluor  
17 Hanford Inc.(Co-operator), Washington Closure Hanford LLC (Co-operator), Bechtel National, Inc.  
18 (Co-operator), CH2M HILL Hanford Group, Inc. (Co-operator), and Pacific Northwest National  
19 Laboratory (Co-operator).
- 20 m. The term "**Permittees**" for purposes of corrective action under Permit Condition II.Y means only the  
21 United States Department of Energy (owner/operator).
- 22 n. The term "**Raw Data**" means the initial value of analog or digital instrument output, and/or manually  
23 recorded values obtained from measurement tools or personal observation. These values are  
24 converted into reportable data (e.g., concentration, percent moisture) via automated procedures  
25 and/or manual calculations.
- 26 o. The term "**RCRA Permit**" means the Dangerous Waste Portion of the RCRA Permit for the  
27 Treatment, Storage, and Disposal of Dangerous Waste (Dangerous Waste Permit) issued by the  
28 Washington State Department of Ecology, pursuant to Chapter 70.105 RCW and Chapter 173-303  
29 WAC, coupled with the HSWA Portion of the RCRA Permit for the Treatment, Storage, and  
30 Disposal of Hazardous Waste (HSWA Permit) issued by EPA, Region 10, pursuant to 42 U.S.C.  
31 6901 et seq. and 40 CFR Parts 124 and 270.
- 32 p. The term "**Reasonable Times**" means normal business hours; hours during which production,  
33 treatment, storage, construction, disposal, or discharge occurs, or times when Ecology suspects a  
34 violation requiring immediate inspection.
- 35 q. The term "**Release**" means any intentional or unintentional spilling, leaking, pouring, emitting,  
36 emptying, discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous  
37 constituents into the environment and includes the abandonment or discarding of barrels, containers,  
38 and other receptacles containing dangerous waste or dangerous constituents, and includes any  
39 releases within the meaning of release at RCW 70.105D.020(20).

- 1 r. The term "**Significant Discrepancy**" in regard to a manifest or shipping paper, means a discrepancy  
2 between the quantity or type of dangerous waste designated on the manifest, or shipping paper, and  
3 the quantity or type of dangerous waste a TSD unit actually receives. A significant discrepancy in  
4 quantity is a variation greater than ten (10) percent in weight for bulk quantities (e.g., tanker trucks,  
5 railroad tank cars, etc.), or any variation in piece count for nonbulk quantities (i.e., any missing  
6 container or package would be a significant discrepancy). A significant discrepancy in type is an  
7 obvious physical or chemical difference which can be discovered by inspection or waste analysis  
8 (e.g., waste solvent substituted for waste acid).
- 9 s. The term "**Solid Waste Management Unit (SWMU)**" means any discernible location at the Facility  
10 where solid wastes have been placed at any time, irrespective of whether the location was intended  
11 for the management of solid or dangerous waste, and includes any area at the Facility at which solid  
12 wastes have been routinely and systematically released (for example through spills), and includes  
13 dangerous waste treatment, storage, and disposal units.
- 14 t. The term "**Unit**" or "**TSD unit**", as used in Parts I through VI of this Permit, means the contiguous  
15 area of land on or in which dangerous waste is placed, or the largest area in which there is a  
16 significant likelihood of mixing dangerous waste constituents in the same area. A TSD unit, for  
17 purposes of this Permit, is a subgroup of the Facility which has been identified in a Hanford Facility  
18 Dangerous Waste Part A Form.

**ACRONYMS**

1		
2	ALARA	As Low As Reasonably Achievable
3	AMSF	Alkali Metal Storage Facility
4	APDS	Ash Pit Demolition Site
5	APP	Used to Denote Appendix Page Numbers
6	APT	Area Process Trenches
7	ARAR	Applicable, Relevant, and Appropriate Requirements
8	BNI	Bechtel National, Inc
9	BPDS	Borrow Pit Demolition Site
10	CD/RR	Chemical Disposal/Recycle Request
11	CERCLA	Comprehensive Environmental Response Compensation and Liability
12		Act of 1980 (as Amended by the Superfund Reauthorization Act of
13		1986)
14	CFR	Code of Federal Regulations
15	CHG	CH2M HILL Hanford Group, Inc.
16	CIP	Construction Inspection Plan
17	CLARC	Cleanup Levels and Risk Calculations
18	CLP	Contract Laboratory Program
19	COC	Chemical Contaminants of Concern
20	CPP	CERCLA Past Practice
21	USDOE-RL	U.S. Department of Energy, Richland Operations Office
22	USDOE-ORP	U.S. Department of Energy, Office of River Protection
23	DQO	Data Quality Objective
24	DSC	Differential Scanning Colorimetry
25	EC	Emergency Coordinator
26	Ecology	Washington State Department of Ecology
27	EPA	U.S. Environmental Protection Agency
28	ERA	Expedited Response Action
29	ETF	200 Area Effluent Treatment Facility
30	HFFACO	Hanford Federal Facility Agreement and Consent Order
31	FH	Fluor Hanford, Inc.
32	GW	Ground Water
33	HPADS	Hanford Patrol Academy Demolition Site
34	HSWA	Hazardous and Solid Waste Amendments of 1984
35	HWMA	Hazardous Waste Management Act
36	ID	Identification
37	IRM	Interim Remedial Measure
38	LDR	Land Disposal Restrictions
39	LERF	Liquid Effluent Retention Facility
40	LSFF	105-DR Large Sodium Fire Facility
41	MTCA	Model Toxics Control Act

1	OSWER	Office of Solid Waste and Emergency Response
2	PNNL	Pacific Northwest National Laboratory
3	QA	Quality Assurance
4	QAPP	Quality Assurance Project Plan
5	QC	Quality Control
6	RCRA	Resource Conservation and Recovery Act of 1976
7	RCW	Revised Code of Washington
8	ROD	Record of Decision
9	RPD	Relative Percent Difference
10	RPP	RCRA Past Practice
11	SAP	Sampling and Analysis Plan
12	SARA	Superfund Amendments and Reauthorization Act of 1986
13	SCD	Security Control Devices
14	SHLWS	Simulated High Level Waste Slurry
15	SOP	Standard Operating Procedure
16	SWMU	Solid Waste Management Unit
17	TCLP	Toxicity Characteristic Leaching Procedure
18	TSD	Treatment, Storage, and/or Disposal
19	USDOE	United States Department of Energy
20	U.S.C.	United States Code
21	WAC	Washington Administrative Code
22	WAP	Waste Analysis Plan
23	WCH	Washington Closure Hanford
24	WTP	Waste Treatment and Immobilization Plant
25	183-H	183-H Solar Evaporation Basins
26	242-A	242-A Evaporator
27	300 APT	300 Area Process Trenches
28	300 ASE	300 Area Solar Evaporator
29	303-K	303-K Storage Facility
30	305-B	305-B Storage Facility
31	325 HWTUs	325 Hazardous Waste Treatment Units
32	616-NRDWSF	616 Nonradioactive Dangerous Waste Storage Facility

**PART I - STANDARD CONDITIONS**

**I.A EFFECT OF PERMIT**

I.A.1 The Permittees are authorized to treat, store, and dispose of dangerous waste in accordance with the Conditions of this Permit and in accordance with the applicable provisions of Chapter 173-303 WAC (including provisions of the Chapter as they have been applied in the HFFACO). Any treatment, storage, or disposal of dangerous waste by the Permittees at the Facility that is not authorized by this Permit, or by WAC 173-303-400 (including provisions of this regulation as they have been applied in the HFFACO), for those TSD units not subject to this Permit, and for which a Permit is required by Chapter 173-303 WAC, is prohibited.

TSD units operating or closing under interim status will maintain interim status until that TSD unit is incorporated into Part III, V, and/or VI of this Permit, or until interim status is terminated under WAC 173-303-805(8). Interim status units will be incorporated into this Permit through the Permit modification process.

I.A.2 The Conditions of this Permit will be applied to the Facility as defined by the Permit Applicability Matrix (Permit Attachment 3).

I.A.3 USDOE is responsible for activities which include, but are not limited to, the overall management and operation of the Facility.

FH is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

PNNL is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

WCH is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

CHG is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

BNI is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.

I.A.4 Coordination with the HFFACO

Each TSD unit will have an application for a final status Permit or closure/post-closure plan submitted to Ecology in accordance with the schedules identified in the HFFACO Milestone M-20-00 or in accordance with WAC 173-303-830. After completion of the Permit application or closure/post-closure plan review, a final Permit decision will be made pursuant to WAC 173-303-840. Specific Conditions for each TSD unit will be incorporated into this Permit in accordance with the Class 3 Permit modification procedure identified in Permit Condition I.C.3.

**I.B PERSONAL AND PROPERTY RIGHTS**

This Permit does not convey property rights of any sort, or any exclusive privilege; nor does it authorize any injury to persons or property, or any invasion of other private rights, or any violation of federal, state, or local laws or regulations.

**I.C PERMIT ACTIONS**

**I.C.1 Modification, Revocation, Reissuance, or Termination**

This Permit may be modified, revoked and reissued, or terminated by Ecology for cause per WAC 173-303-810(7) as specified in WAC 173-303-830(3), (4), and (5).

**I.C.2 Filing of a Request**

The filing of a request for a Permit modification, or revocation and reissuance, or termination, or a notification of planned changes, or anticipated noncompliance on the part of the Permittees, will not stay any Permit condition [WAC 173-303-810(7)]except as provided in WAC 173-303-810(2) under an emergency permit.

**I.C.3 Modifications**

Except as provided otherwise by specific language in this Permit, the Permit modification procedures of WAC 173-303-830(2), (3), and (4) will apply to modifications or changes in design or operation of the Facility, or any modification or change in dangerous waste management practices covered by this Permit. As an exception, the Permittees will provide notifications to Ecology required by WAC 173-303-830(4)(a)(i)(A) on a quarterly basis. Each quarterly notification will be submitted within ten (10) days of the end of the quarter, and provide the required information for all such modification s put into effect during that reporting period. Quarterly reporting periods will be based upon the state Fiscal Year. For notifications required by the Permittees to persons on the facility mailing list described in WAC 173-303-830(4)(a)(i)(B), -830(4)(b)(ii), -830(4)(c)(ii), and -830(4)(e)(ii)(C), use of appropriate HFFACO Community Relations Plan publications and/or list servers for public involvement satisfy the notification requirements.

**I.D SEVERABILITY**

**I.D.1 Effect of Invalidation**

The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is contested and/or held invalid, the application of such provision to other circumstances and the remainder of this Permit will not be affected thereby. Invalidation of any state statutory or regulatory provision which forms the basis for any Condition of this Permit does not affect the validity of any other state statutory or regulatory basis for said Condition.

**I.D.2 Final Resolution**

In the event that a Condition of this Permit is stayed for any reason, the Permittees will continue to comply with the related applicable and relevant interim status standards in WAC 173-303-400 until final resolution of the stayed Condition, unless Ecology determines compliance with the related applicable and relevant interim status standards would be technologically incompatible with compliance with other Conditions of this

Permit, which have not been stayed, or unless the HFFACO authorizes an alternative action, in which case the Permittees will comply with the HFFACO.

**I.E DUTIES AND REQUIREMENTS**

**I.E.1 Duty to Comply**

The Permittees will comply with all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit issued under WAC 173-303-804. Any Permit noncompliance other than noncompliance authorized by an emergency Permit constitutes a violation of Chapter 70.105 RCW, as amended, and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, and/or denial of a Permit renewal application.

**I.E.2 Compliance Not Constituting Defense**

Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Section 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C. Sections 6927, 6928, 6934, and 6973), Section 104, 106(a) or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. Sections 9604, 9606(a), and 9607], as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9601 *et seq.*), or any other federal, state, or local law governing protection of public health, or the environment; provided, however, that compliance with this Permit during its term constitutes compliance at those areas subject to this Permit for the purpose of enforcement with WAC 173-303-140, WAC 173-303-180, WAC 173-303-280 through -395, WAC 173-303-600 through -680, WAC 173-303-810, and WAC 173-303-830, except for Permit modifications and those requirements not included in the Permit that become effective by statute, or that are promulgated under 40 CFR Part 268 restricting the placement of dangerous waste in or on the land.

**I.E.3 Duty to Reapply**

If the Permittees wish to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittees must apply for, and obtain a new Permit, in accordance with WAC 173-303-806(6).

**I.E.4 Permit Expiration and Continuation**

This Permit, and all Conditions herein, will remain in effect beyond the Permit's expiration date until the effective date of the new Permit, if the Permittees have submitted a timely, complete application for renewal per WAC 173-303-806 and, through no fault of the Permittees, Ecology has not made a final Permit determination as set forth in WAC 173-303-840.

**I.E.5 Need to Halt or Reduce Activity Not a Defense**

It will not be a defense in the case of an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditions of this Permit.

**I.E.6 Duty to Mitigate**

In the event of noncompliance with the Permit, the Permittees will take all reasonable steps to minimize releases to the environment, and will carry out such measures as are reasonable to minimize or correct adverse impacts on human health and the environment.

I.E.7 Proper Operation and Maintenance

The Permittees will at all times properly operate and maintain all facilities and systems of treatment and control, which are installed or used by the Permittees, to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of backup or auxiliary facilities, or similar systems only when necessary to achieve compliance with the Conditions of the Permit.

I.E.8 Duty to Provide Information

The Permittees will furnish to Ecology, within a reasonable time, any relevant information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittees will also furnish to Ecology, upon request, copies of records required to be kept by this Permit.

I.E.9 Inspection and Entry

The Permittees will allow Ecology, or authorized representatives, upon the presentation of Ecology credentials, to:

I.E.9.a During operating hours, and at all other reasonable times, enter and inspect the Facility or any unit or area within the Facility, where regulated activities are located or conducted, or where records must be kept under the Conditions of this Permit;

I.E.9.b Have access to, and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;

I.E.9.c Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

I.E.9.d Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance, or as otherwise authorized by state law, as amended, for substances or parameters at any location.

I.E.10 Monitoring and Records

I.E.10.a Samples and measurements taken by the Permittees for the purpose of monitoring required by this Permit will be representative of the monitored activity. Sampling methods will be in accordance with WAC 173-303-110 or 40 CFR 261, unless otherwise specified in this Permit, or agreed to in writing by Ecology. Analytical methods will be as specified in the most recently published test procedure of the documents cited in WAC 173-303-110(3)(a) through (h), unless otherwise specified in this Permit, or agreed to in writing by Ecology.

I.E.10.b The Permittees will retain at the TSD unit(s), or other locations approved by Ecology, as specified in Parts III, V, and/or VI of this Permit, records of monitoring information required for compliance with this Permit, including calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports and records required by this Permit, and records of data used to complete the application for this Permit for a period of at least ten (10) years from the date of the sample, measurement, report, or application, unless otherwise required for certain



- 1 information by other Conditions of this Permit. This information may be retained on  
2 electronic media.
- 3 I.E.10.c The Permittees will retain at the Facility, or other approved location, records of all  
4 monitoring and maintenance records, copies of all reports and records required by this  
5 Permit, and records of all data used to complete the application for this Permit, which are  
6 not associated with a particular TSD unit, for a period of at least ten (10) years from the  
7 date of certification of completion of post-closure care, or corrective action for the  
8 Facility, whichever is later. This information may be retained on electronic media.
- 9 I.E.10.d The record retention period may be extended by request of Ecology at any time by  
10 notification, in writing, to the Permittees, and is automatically extended during the course  
11 of any unresolved enforcement action regarding this Facility to ten (10) years beyond the  
12 conclusion of the enforcement action.
- 13 I.E.10.e Records of monitoring information shall include:
- 14 I.E.10.e.i The date, exact place and time of sampling or measurements;
- 15 I.E.10.e.ii The individual who performed the sampling or measurements and their affiliation;
- 16 I.E.10.e.iii The dates the analyses were performed;
- 17 I.E.10.e.iv The individual(s) who performed the analyses and their affiliation;
- 18 I.E.10.e.v The analytical techniques or methods used; and,
- 19 I.E.10.e.vi The results of such analyses.
- 20 I.E.11 Reporting Planned Changes
- 21 The Permittees will give notice to Ecology, as soon as possible, of any planned physical  
22 alterations, or additions to the Facility subject to this Permit. Such notice does not  
23 authorize any noncompliance with, or modification of, this Permit.
- 24 I.E.12 Certification of Construction or Modification
- 25 I.E.12.a The Permittees may not commence treatment, storage, or disposal of dangerous wastes in a  
26 new or modified portion of TSD units subject to this Permit until:
- 27 I.E.12.b The Permittees have submitted to Ecology, by certified mail, overnight express mail, or  
28 hand delivery, a letter signed by the Permittees, and a registered professional engineer,  
29 stating that the TSD unit has been constructed or modified in compliance with the  
30 Conditions of this Permit; and,
- 31 I.E.12.c Ecology has inspected the modified or newly constructed TSD unit, and finds that it is in  
32 compliance with the Conditions of this Permit; or
- 33 I.E.12.d Within fifteen (15) days of the date of receipt of the Permittees' letter, the Permittees have  
34 not received notice from Ecology of its intent to inspect, prior inspection is waived, and  
35 the Permittees may commence treatment, storage, and disposal of dangerous waste.
- 36 I.E.13 Anticipated Noncompliance
- 37 The Permittees will give at least thirty (30) days advance notice to Ecology of any planned  
38 changes in the Facility subject to this Permit, or planned activity which might result in  
39 noncompliance with Permit requirements.

- 1 If thirty (30) days advance notice is not possible, then the Permittees will give notice  
2 immediately after the Permittees become aware of the anticipated noncompliance. Such  
3 notice does not authorize any noncompliance with, or modification of, this Permit.
- 4 I.E.14 Transfer of Permits
- 5 I.E.14.a This Permit may be transferred to a new owner/operator only if it is modified, or revoked  
6 and reissued, pursuant to WAC 173-303-830(3)(b). Unit-specific portion may be  
7 transferred to a new Co-operator as a Class <sup>1</sup>1 modification with prior approval of the  
8 Department's director.
- 9 I.E.14.b Before transferring ownership or operation of the Facility during its operating life, the  
10 owner/operator will notify the new owner/operator in writing, of the requirements of  
11 WAC 173-303-290(2), -600 and -806, and this Permit.
- 12 I.E.15 Immediate Reporting
- 13 I.E.15.a The Permittees will verbally report to Ecology any release of dangerous waste or  
14 hazardous substances, or any noncompliance with the Permit which may endanger human  
15 health or the environment. Any such information will be reported immediately after the  
16 Permittees become aware of the circumstances.
- 17 I.E.15.b The immediate verbal report will contain all the information needed to determine the  
18 nature and extent of any threat to human health and the environment, including the  
19 following:
- 20 I.E.15.b.i Name, address, and telephone number of the Permittee responsible for the release or  
21 noncompliant activity;
- 22 I.E.15.b.ii Name, location, and telephone number of the unit at which the release occurred;
- 23 I.E.15.b.iii Date, time, and type of incident;
- 24 I.E.15.b.iv Name and quantity of material(s) involved;
- 25 I.E.15.b.v The extent of injuries, if any;
- 26 I.E.15.b.vi An assessment of actual or potential hazard to the environment and human health, where  
27 this is applicable;
- 28 I.E.15.b.vii Estimated quantity of released material that resulted from the incident; and,
- 29 I.E.15.b.viii Actions which have been undertaken to mitigate the occurrence.
- 30 I.E.15.c The Permittees will report, in accordance with Permit Conditions I.E.15.a. and I.E.15.b.,  
31 any information concerning the release, or unpermitted discharge, of any dangerous waste  
32 or hazardous substances that may cause an endangerment to drinking water supplies, or  
33 ground or surface waters, or of a release, or discharge of dangerous waste, or hazardous  
34 substances, or of a fire or explosion at the Facility, which may threaten human health or  
35 the environment. The description of the occurrence and its cause will include all  
36 information necessary to fully evaluate the situation and to develop an appropriate course  
37 of action.
- 38 I.E.15.d For any release or noncompliance not required to be reported to Ecology immediately, a  
39 brief account must be entered within two (2) working days, into the TSD Operating  
40 Record, for a TSD unit, or into the Facility Operating Record, inspection log, or separate  
41 spill log, for non-TSD units. This account must include: the time and date of the release,

the location and cause of the release, the type and quantity of material released, and a brief description of any response actions taken or planned.

I.E.15.e All releases, regardless of location of release, or quantity of release, will be controlled and mitigated, if necessary, as required by WAC 173-303-145(3).

I.E.16 Written Reporting

Within fifteen (15) days after the time the Permittees become aware of the circumstances of any noncompliance with this Permit, which may endanger human health or the environment, the Permittees will provide to Ecology a written report. The written report will contain a description of the noncompliance and its cause (including the information provided in the verbal notification); the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue, if the noncompliance has not been corrected; corrective measures being undertaken to mitigate the situation, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

I.E.17 Manifest Discrepancy Report

I.E.17.a For dangerous waste received from outside the Facility, whenever a significant discrepancy in a manifest is discovered, the Permittees will attempt to reconcile the discrepancy. If not reconciled within fifteen (15) days of discovery, the Permittees will submit a letter report in accordance with WAC 173-303-370(4), including a copy of the applicable manifest or shipping paper, to Ecology.

I.E.17.b For dangerous waste which is being transported within the Facility (i.e., shipment of on-site generated dangerous waste), whenever a significant discrepancy in the shipping papers (see Permit Condition II.Q.1.) is discovered, the Permittees will attempt to reconcile the discrepancy. If not reconciled within fifteen (15) days of discovery, the Permittees will note the discrepancy in the receiving unit's Operating Record.

I.E.18 Unmanifested Waste Report

The Permittees will follow the provisions of WAC 173-303-370 for the receipt of any dangerous waste shipment from off-site. The Permittees will also submit a report in accordance with WAC 173-303-390(1) to Ecology within fifteen (15) days of receipt of any unmanifested dangerous waste shipment received from off-site sources.

I.E.19 Other Noncompliance

The Permittees will report to Ecology all instances of noncompliance, not otherwise required to be reported elsewhere in this Permit, at the time the Annual Dangerous Waste Report is submitted.

I.E.20 Other Information

Whenever the Permittees become aware that they have failed to submit any relevant facts in a Permit application, closure plan, or post-closure plan, or submitted incorrect information in a Permit application, closure plan, or post-closure plan, or in any report to Ecology, the Permittees will promptly submit such facts or corrected information.

**I.E.21 Reports, Notifications, and Submissions**

All written reports, notifications or other submissions, which are required by this Permit to be sent, or given to the Director or Ecology, should be sent certified mail, overnight express mail, or hand delivered, to the current address and telephone number shown below. This address and telephone number may be subject to change.

Washington State Department of Ecology  
Nuclear Waste Program  
3100 Port of Benton Blvd  
Richland, Washington 99352  
Telephone: (509) 372-7950

Telephonic and oral reports/notifications also need to be provided to Ecology's Richland Office.

Ecology will give the Permittees written notice of a change in address or telephone number. It is the responsibility of the Permittees to ensure any required reports, notifications, or other submissions are transmitted to the addressee listed in this Condition. However, the Permittees will not be responsible for ensuring verbal and written correspondence reaches a new address or telephone number until after their receipt of Ecology's written notification.

**I.E.22 Annual Report**

The Permittees will comply with the annual reporting requirements of WAC 173-303-390(2)(a) through (e), and (g).

**I.F SIGNATORY REQUIREMENT**

All applications, reports, or information submitted to Ecology, which require certification, will be signed and certified in accordance with WAC 173-303-810(12) and (13). All other reports required by this Permit and other information requested by Ecology will be signed in accordance with WAC 173-303-810(12).

**I.G CONFIDENTIAL INFORMATION**

The Permittees may declare as confidential any information required to be submitted by this Permit, at the time of submission, in accordance with WAC 173-303-810(15).

**I.H DOCUMENTS TO BE MAINTAINED AT FACILITY SITE**

The Permittees will maintain at the Facility, or some other location approved by Ecology, the following documents and amendments, revisions, and modifications to these documents: (1) This Permit and all Attachments; and (2) The Hanford Facility Operating Record.

All dangerous waste Part B permit applications, post closure permit applications, and closure plan applications are maintained in the Administrative Record located at 2440 Stevens, Room 1101, Richland, WA.

1 Other approved locations: (1) 700 Area, (2) Locations within the City of Richland under  
2 control of one or more of the Permittees, (3) Administrative Record locations within the  
3 Stevens Center complex, (4) Consolidated Information Center at Washington State  
4 University, Tri-Cities. (5) Archived records at the National Archives and Records  
5 Administration (NARA), Pacific Alaska Region, 6125 Sand Point Way NE, Seattle,  
6 Washington, 98115-7999.

7 These documents will be maintained for ten (10) years after post-closure care or corrective  
8 action for the Facility, whichever is later, has been completed and certified as complete.

**PART II - GENERAL FACILITY CONDITIONS**

**II.A FACILITY CONTINGENCY PLAN**

II.A.1 The Permittees will immediately carry out applicable provisions of the *Hanford Emergency Management Plan* as provided in Permit Attachment 4, pursuant to WAC 173-303-360(2), whenever there is an incident meeting the criteria of Permit Attachment 4, Section 4.2. Enforceable portions of Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02) are identified in Permit Attachment 4, Appendix A.

II.A.2 The Permittees will comply with the requirements of WAC 173-303-350(4), as provided in the *Hanford Emergency Management Plan* (Permit Attachment 4). The *Hanford Emergency Management Plan* provides reference to the need for unit-specific contingency documentation. Unit-specific contingency documentation for Part III TSD units is included in Part III of this Permit. Unit-specific contingency documentation for Part V and VI TSD units required by this Permit condition is maintained in the Hanford Facility Operating Record, Unit-Specific files.

II.A.3 The Permittees will review and amend, if necessary, the applicable portions of the *Hanford Emergency Management Plan*, as provided in Permit Attachment 4, pursuant to WAC 173-303-350(5), and in accordance with the provisions of WAC 173-303-830(4). The Permittees will be able to demonstrate how Amendments to the applicable portions are controlled. The plan will be amended within a period of time agreed upon by Ecology.

II.A.4 The Permittees will comply with the requirements of WAC 173-303-350(3) and -360(1) concerning the emergency coordinator, except the names and home telephone numbers will be on file with the single point-of-contact, phone number (509) 373-3800 or 375-2400 (for PNNL units) as described in the *Hanford Emergency Management Plan*.

**II.B PREPAREDNESS AND PREVENTION**

II.B.1 The Permittees will equip the Facility with the equipment specified in WAC 173-303-340(1) as specified in the *Hanford Emergency Management Plan* (Permit Attachment 4). Unit-specific preparedness and prevention provisions are included in Parts III, V, and/or VI of this Permit.

II.B.2 The Permittees will test and maintain the equipment specified in the previous Condition as necessary to assure proper operation in the event of emergency.

II.B.3 The Permittees will maintain access to communications or alarms pursuant to WAC 173-303-340(2), as provided in the *Hanford Emergency Management Plan* (Permit Attachment 4) and unit-specific contingency plans.

II.B.4 The Permittees will comply with WAC 173-303-340(4) and WAC 173-303-355(1) pertaining to arrangements with local authorities.

II.B.5 Based on the arrangements with local authorities required by WAC 173-303-340(4) documented in Permit Attachment 4, Table 3-1, the Permittees will maintain the Memorandums of Understanding to comply with WAC 173-303-350(4)(b). The Hanford Facility Memorandums of Understanding with local authorities provides emergency planning and coordination equivalent to submittal of the contingency plan to local authorities

**II.C PERSONNEL TRAINING**

II.C.1 The Permittees will conduct personnel training as required by WAC 173-303-330. The Permittees will maintain documents in accordance with WAC 173-303-330(2) and (3). Training records may be maintained in the Hanford Facility Operating Record, or on electronic data storage.

II.C.2 All Hanford Facility personnel will receive general Facility training within six (6) months of hire. This training will provide personnel with orientation of dangerous waste management activities being conducted at the Hanford Facility. This training will include:

II.C.2.a Description of emergency signals and appropriate personnel response;

II.C.2.b Identification of contacts for information regarding dangerous waste management activities;

II.C.2.c Introduction to waste minimization concepts;

II.C.2.d Identification of contact(s) for emergencies involving dangerous waste; and

II.C.2.e Familiarization with the applicable portions of the *Hanford Emergency Management Plan*.

II.C.3 Description of training plans for personnel assigned to TSD units subject to this Permit are delineated in the unit-specific Chapters in Parts III, V, and/or VI of this Permit.

II.C.4 The Permittees will provide the necessary training to non-Facility personnel (i.e., visitors, sub-contractors), as appropriate, for the locations of such personnel, and the activities that will be undertaken. At a minimum, this training will describe dangerous waste management hazards at the Facility.

**II.D WASTE ANALYSIS**

II.D.1 All waste analyses required by this Permit will be conducted in accordance with a written waste analysis plan (WAP), or sampling and analysis plan (SAP). Operating TSD units will have a WAP, which will be approved through incorporation of the TSD unit into Part III of this Permit. Closing TSD units, and units in post-closure, should have a SAP and, if necessary, a WAP, which will be approved through incorporation of the TSD unit into Part V and/or VI of this Permit.

II.D.2 Until a WAP is implemented in accordance with Permit Condition II.D.1., any unit(s) identified in Parts III, V, and/or VI of this Permit, without a unit-specific WAP approved by Ecology, will not treat, store, or dispose of dangerous waste, unless specified otherwise by Ecology in writing.

II.D.3 Each TSD unit WAP will include:

II.D.3.a.i The parameters for which each dangerous waste will be analyzed, and the rationale for selecting these parameters; (i.e., how analysis for these parameters will provide sufficient information on the waste properties to comply with WAC 173-303-300(1), (2), (3), and (4);

II.D.3.a.ii The methods of obtaining or testing for these parameters;

II.D.3.a.iii The methods for obtaining representative samples of wastes for analysis (representative sampling methods are discussed in WAC 173-303-110(2);

II.D.3.a.iv The frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current;

- 1 II.D.3.a.v The waste analyses which generators have agreed to supply;
- 2 II.D.3.a.vi Where applicable, the methods for meeting the additional waste analysis requirements for  
3 specific waste management methods, as specified in WAC 173-303-140(4)(b),  
4 173-303-395(1), 173-303-630 through 173-303-670, and 40 CFR 264.1034, 264.1063,  
5 284(a), and 268.7, for final status facilities;
- 6 II.D.3.a.vii For off-site facilities, the procedures for confirming that each dangerous waste received  
7 matches the identity of the waste specified on the accompanying manifest, or shipping  
8 paper. This includes at least:
- 9 A. The procedure for identifying each waste movement at the Facility; and,  
10 B. The method for obtaining a representative sample of the waste to be identified, if the  
11 identification method includes sampling.
- 12 II.D.3.a.viii For surface impoundments exempted from Land Disposal Restrictions (LDR) under  
13 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and  
14 schedules for:
- 15 II.D.3.a.viii.a The sampling of impoundment contents;
- 16 II.D.3.a.viii.b The analysis of test data; and
- 17 II.D.3.a.viii.c The annual removal of residues that are not delisted under 40 CFR 260.22, or which  
18 exhibit a characteristic of hazardous waste and either;
- 19 1. Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or  
20 2. Where no treatment standards have been established:  
21 i) Such residues are prohibited from land disposal under 40 CFR 268.32, or RCRA  
22 section 3004(d); or  
23 ii) Such residues are prohibited from land disposal under 40 CFR 268.33(f); and
- 24 II.D.3.a.ix For off-site facilities, the procedures for confirming that each dangerous waste received  
25 matches the identity of the waste specified on the accompanying manifest, or shipping  
26 paper. This includes, at least:
- 27 II.D.3.a.ix.a The procedure for identifying each waste movement at the Facility; and
- 28 II.D.3.a.ix.b The method for obtaining a representative sample of the waste to be identified, if the  
29 identification method includes sampling.
- 30 II.D.4 Should waste analysis be required by this Permit at a location on the Facility, other than at  
31 a TSD unit, a SAP will be maintained by the Permittees, and made available upon request  
32 from Ecology. Any SAP required by this Permit, not associated with a particular TSD  
33 unit, will include the elements of Permit Conditions II.D.3.a.i through II.D.3.a.iv.



**II.E QUALITY ASSURANCE/QUALITY CONTROL**

II.E.1 All WAPs and SAPs required by this Permit will include a quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented in accordance with HFFACO Action Plan §6.5, Quality Assurance, and reported/made available in accordance with HFFACO Action Plan §9.6, Data Access and Delivery Requirements.

II.E.2 The level of QA/QC for the collection, preservation, transportation, and analysis of each sample required for implementation of this Permit may be based upon an Ecology-approved DQO for the sample. These DQOs will be approved by Ecology in writing or through incorporation of unit plans and Permits into Parts III, V, and/or VI of this Permit.

**II.F GROUND WATER AND VADOSE ZONE MONITORING**

The Permittees will comply with the ground water monitoring requirements of WAC 173-303-645. This Condition will apply only to those wells the Permittees use for the ground water monitoring programs applicable to the TSD units incorporated into Parts III, V, and/or VI of this Permit. Where releases from TSD units subject to this Permit have been documented or confirmed by investigation, or where vadose zone monitoring is proposed for integration with ground water monitoring, the Permittees will evaluate the applicability of vadose zone monitoring. The Permittees will consult with Ecology regarding the implementation of these requirements. If agreed to by Ecology, integration of ground water and vadose zone monitoring, for reasons other than this Permit, may be accommodated by this Permit. Results from other investigation activities will be used whenever possible to supplement and/or replace sampling required by this Permit.

**II.F.1 Purgewater Management**

Purgewater will be handled in accordance with the requirements set forth in Permit Attachment 5, *Purgewater Management Plan*.

**II.F.2 Well Remediation and Abandonment**

II.F.2.a The Permittees will inspect the integrity of active resource protection wells as defined by WAC 173-160-030, subject to this Permit, at least once every five (5) years. These inspections will be recorded in the Operating Record. The Permittees will prepare and maintain a plan and schedule by January 26, 1995, specifying the schedule and technical standards for this program. The Permittees will provide a copy of this plan upon the request of Ecology.

II.F.2.b The Permittees will evaluate resource protection wells subject to this Permit according to Sections 4.0 and 5.0 of the *Hanford Well Maintenance Inspection Plan* (Permit Attachment 6) and the *Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and CERCLA*, June 1990 (Permit Attachment 7), to determine if a well has a potential use as a qualified well. The Permittees will abandon or remediate unusable wells according to the requirements of Chapter 18.104 RCW, Chapter 173-160 WAC, and Chapter 173-162 WAC to ensure that the integrity of wells subject to this Permit is maintained. The time for this remediation will be specified in Parts III, V, and/or VI of this Permit.

II.F.2.c Ecology will receive notice in writing at least seventy-two (72) hours before the Permittees remediate (excluding maintenance activities), or abandon any well subject to this Permit.

II.F.2.d For wells subject to this Permit, the Permittees will achieve full compliance with Chapter 173-160 WAC and Chapter 18.104 RCW consistent with a rolling five (5) year schedule agreed to by Ecology and the Permittees. This process will be completed by the year 2012.

#### II.F.3 Well Construction

All wells constructed pursuant to this Permit will be constructed in compliance with Chapter 173-160 WAC.

### II.G SITING CRITERIA

The Permittees will comply with the applicable notice of intent and siting criteria of WAC 173-303-281 and WAC 173-303-282, respectively.

### II.H RECORDKEEPING AND REPORTING

The provisions of WAC 173-303-620 are not applicable to the Hanford Facility because the USDOE is both owner and operator of the Hanford Facility. WAC 173-303-620(1)(c).

### II.I FACILITY OPERATING RECORD

II.I.1 The Permittees will maintain a written Facility Operating Record until ten (10) years after post-closure, or corrective action is complete and certified for the Facility, whichever is later. Except as specifically provided otherwise in this Permit, the Permittees will also record all information referenced in this Permit in the Facility Operating Record within seven (7) working days after the information becomes available. A TSD unit-specific Operating Record will be maintained for each TSD unit at a location identified in Parts III, V, and VI of this Permit. This information may be maintained on electronic media. Each TSD unit-specific Operating Record will be included by reference in the Facility Operating Record. Information required in each TSD unit-specific Operating Record is identified on a unit-by-unit basis in Part III, V, or VI of this Permit. The Facility Operating Record will include, but not be limited to, the following information.

II.I.1.a A description of the system(s) currently utilized to identify and map solid waste management units and their locations. The description of the system(s) is required to include an identification of on-site access to the system's data, and an on-site contact name and telephone number. In addition to, or as part of, this system(s), the Permittees will also maintain a list identifying active ninety (90)-day waste storage areas, and dangerous waste satellite accumulation areas and their locations. The list will identify the location, the predominant waste types managed at the area, and a date identifying when the list was compiled. Maps will be provided by the Permittees upon request by Ecology;

II.I.1.b Records and results of waste analyses required by WAC 173-303-300;

II.I.1.c An identification of the system(s) currently utilized to generate Occurrence Reports. The identification of the system(s) is required to include a description, an identification of an on-site location of hard-copy Occurrence Reports, an identification of on-site access to the system's data, and an on-site contact name and telephone number;

II.I.1.d Copies of all unmanifested waste reports;

- 1 II.I.1.e The *Hanford Emergency Management Plan*, as well as summary reports, and details of all  
2 incidents that require implementing the contingency plan, as specified in  
3 WAC 173-303-360(2)(k);
- 4 II.I.1.f An identification of the system(s) currently utilized and being developed to record  
5 personnel training records and to develop training plans. The identification of the  
6 system(s) is required to include a description, an identification of on-site access to the  
7 system's data, and an on-site contact name and telephone number;
- 8 II.I.1.g Preparedness and prevention arrangements made pursuant to WAC 173-303-340(4) and  
9 documentation of refusal by state or local authorities that have declined to enter into  
10 agreements in accordance with WAC 173-303-340(5);
- 11 II.I.1.h Reserved Condition;
- 12 II.I.1.i An identification and description of the report containing closure and post-closure cost  
13 estimates required by Permit Conditions II.H.1. and II.H.2. The identification will provide  
14 the on-site location and document number of the report;
- 15 II.I.1.j Documentation (e.g., waste profile sheets) of all dangerous waste transported to or from  
16 any TSD unit subject to this Permit. This documentation will be maintained in the  
17 receiving unit's Operating Record from the time the waste is received;
- 18 II.I.1.k An identification of the system(s) currently utilized to cross-reference waste locations to  
19 specific manifest document numbers. The identification of the system(s) is required to  
20 include a thorough description, an identification of an on-site location of a hard-copy data  
21 report, an identification of on-site access to the system's data, and an on-site contact name  
22 and telephone number;
- 23 II.I.1.l Reserved Permit Condition;
- 24 II.I.1.m Annual Reports required by this Permit;
- 25 II.I.1.n An identification of all systems currently utilized to record monitoring information,  
26 including all calibration and maintenance records, and all original strip chart recordings  
27 for continuous monitoring instrumentation. The identification of systems will include a  
28 description of the systems. The descriptions will include a confirmation that the criteria of  
29 Permit Condition I.E.10.e. is provided by the utilization of the system. The identification  
30 of the systems will also include an identification of on-site access to the system's data, an  
31 on-site contact name and telephone number;
- 32 II.I.1.o Reserved Permit Condition;
- 33 II.I.1.p Summaries of all records of ground water corrective action required by  
34 WAC 173-303-645;
- 35 II.I.1.q An identification of the system(s) currently being utilized and being developed to evaluate  
36 compliance with the Conditions of this Permit and with Chapter 173-303 WAC. The  
37 identification of the system(s) will include a description of the system(s), an identification  
38 of on-site access to the system's data, and an on-site contact name and telephone number.  
39 The description of the system(s) will also include a definition of which portion(s) of the  
40 system(s) is accessible to Ecology;
- 41 II.I.1.r All deed notifications required by this Permit (to be included by reference);

II.I.1.s All inspection reports required by this Permit; and

II.I.1.t All other reports as required by this Permit, including design change documentation and nonconformance documentation.

## **II.J FACILITY CLOSURE**

II.J.1 Final closure of the Hanford Facility will be achieved when closure activities for all TSD units have been completed, as specified in Parts III, IV, V, or VI of this Permit. Completion of these activities will be documented using either certifications of closure, in accordance with WAC 173-303-610(6), or certifications of completion of post-closure care, in accordance with WAC 173-303-610(11).

II.J.2 The Permittees will close all TSD units as specified in Parts III, V, and/or VI of this Permit.

II.J.3 The Permittees will submit a written notification of, or request for, a Permit modification in accordance with the provisions of WAC 173-303-610(3)(b), whenever there is a change in operating plans, facility design, or the approved closure plan. The written notification or request must include a copy of the amended closure plan for review, or approval, by Ecology.

II.J.4 The Permittees will close the Facility in a manner that:

II.J.4.a Minimizes the need for further maintenance;

II.J.4.b Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products, to the ground, surface water, ground water, or the atmosphere; and

II.J.4.c Returns the land to the appearance and use of surrounding land areas to the degree possible, given the nature of the previous dangerous waste activity.

II.J.4.d Meets the requirements of WAC 173-303-610(2)(b).

## **II.K SOIL/GROUND WATER CLOSURE PERFORMANCE STANDARDS**

II.K.1 For purposes of Permit Condition II.K, the term "clean closure" shall mean the status of a TSD unit at the Facility which has been closed to the cleanup levels prescribed by WAC 173-303-610(2)(b), provided certification of such closure has been accepted by Ecology.

II.K.2 The Permittees may close a TSD unit to background levels as defined in Ecology approved Hanford Site Background Documents, if background concentrations exceed the levels prescribed by Permit Condition II.K.1. Closure to these levels, provided the Permittees comply with all other closure requirements for a TSD unit as identified in Parts III, V, and/or VI of this Permit, shall be deemed as "clean closure".

II.K.3 Except for those TSD units identified in Permit Conditions II.K.1, II.K.2, or II.K.4, the Permittees may close a TSD unit to a cleanup level specified under Method C of Chapter 173-340 WAC. Closure of a TSD unit to these levels, provided the Permittees comply with all other closure requirements for the TSD unit as specified in Parts III, V, and/or VI of the Permit, and provided the Permittees comply with Permit Conditions II.K.3.a. through II.K.3.c, shall be deemed as a "modified closure".

- 1 II.K.3.a For "modified closures", the Permittees shall provide institutional controls in accordance  
2 with WAC 173-340-440 which restricts access to the TSD unit for a minimum of  
3 five (5) years following completion of closure. The specific details and duration of  
4 institutional controls shall be specified in Parts III, V, and/or VI of this Permit for a  
5 particular TSD unit.
- 6 II.K.3.b For "modified closures", the Permittees shall provide periodic assessments of the TSD unit  
7 to determine the effectiveness of the closure. The specific details of the periodic  
8 assessments shall be specified in Parts III, V, and/or VI of this Permit. The periodic  
9 assessments shall include, as a minimum, a compliance monitoring plan in accordance  
10 with WAC 173-340-410 that will address the assessment requirements on a unit-by-unit  
11 basis. At least one (1) assessment activity shall take place after a period of five (5) years  
12 from the completion of closure, which will demonstrate whether the soils and ground  
13 water have been maintained at or below the allowed concentrations as specified in  
14 Parts III, V, or VI of this Permit. Should the required assessment activities identify  
15 contamination above the allowable limits as specified in Parts III, V, and/or VI, the TSD  
16 unit must be further remediated, or the requirements of II.K.4. must be followed. Should  
17 the required assessment activities demonstrate that contamination has diminished, or  
18 remained the same, the Permittees may request that Ecology reduce, or eliminate the  
19 assessment activities and/or institutional controls.
- 20 II.K.3.c For "modified closures", the Permittees shall specify the particular activities required by  
21 this Condition in a Post-Closure Permit application.
- 22 II.K.4 Any TSD unit for which Permit Conditions II.K.1, II.K.2, or II.K.3, are not chosen as the  
23 closure option, closing the TSD unit as a landfill may be selected. Closure and post-  
24 closure of the TSD unit as a landfill, must follow the procedures and requirements  
25 specified in WAC 173-303-610.
- 26 II.K.5 The cleanup option selected shall be specified in Parts III, V, and/or VI of this Permit, and  
27 shall be chosen with consideration of the potential future site use for that TSD unit/area.  
28 Definitions contained within Chapter 173-340 WAC shall apply to Permit Condition II.K.  
29 Where definitions are not otherwise provided by this Permit, the HFFACO, or  
30 Chapter 173-303 WAC.
- 31 II.K.6 Deviations from a TSD unit closure plan required by unforeseen circumstances  
32 encountered during closure activities, which do not impact the overall closure strategy, but  
33 provide equivalent results, shall be documented in the TSD unit-specific Operating Record  
34 and made available to Ecology upon request, or during the course of an inspection.
- 35 II.K.7 Where agreed to by Ecology, integration of other statutorily or regulatory mandated  
36 cleanups may be accommodated by this Permit. Results from other cleanup investigation  
37 activities shall be used whenever possible to supplement and/or replace TSD unit closure  
38 investigation activities. All, or appropriate parts of, multipurpose cleanup and closure  
39 documents can be incorporated into this Permit through the Permit modification process.  
40 Cleanup and closures conducted under any statutory authority, with oversight by either  
41 Ecology or the EPA, which meet the equivalent of the technical requirements of Permit  
42 Conditions II.K.1. through II.K.4., may be considered as satisfying the requirements of this  
43 Permit.
- 44 **II.L DESIGN AND OPERATION OF THE FACILITY**
- 45 II.L.1 Proper Design and Construction

The Permittees will design, construct, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous substances to air, soil, ground water, or surface water, which could threaten human health, or the environment.

II.L.2 Design Changes, Nonconformance, and As-Built Drawings

II.L.2.a After completing the Permit modification process in Permit Condition I.C.3, the Permittees will conduct all construction subject to this Permit in accordance with the approved designs, plans and specifications that are required by this Permit, unless authorized otherwise in Permit Conditions II.L.2.b or II.L.2.c. For purposes of Permit Conditions II.L.2.b and II.L.2.c, an Ecology construction inspector, or TSD unit manager, are designated representatives of Ecology.

II.L.2.b During construction of a project subject to this Permit, changes to the approved designs, plans and specifications will be formally documented. All design change documentation will be maintained in the TSD unit-specific Operating Record and will be made available to Ecology upon request or during the course of an inspection. The Permittees will provide copies of design change documentation affecting any critical system to Ecology within five (5) working days of initiating the design change documentation. Identification of critical systems will be included by the Permittees in each TSD unit-specific dangerous waste Permit application, closure plan or Permit modification, as appropriate. Ecology will review an design change documentation modifying a critical system, and inform the Permittees in writing within two (2) working days, whether the proposed design change documentation, when issued, will require a Class 1, 2, or 3 Permit modification. If after two (2) working days Ecology has not responded, it will be deemed as acceptance of the design change documentation by Ecology.

II.L.2.c During construction of a project subject to this Permit, any work completed which does not meet or exceed the standards of the approved design, plans and specifications will be formally documented with nonconformance documentation. All nonconformance documentation will be maintained in the TSD unit-specific Operating Record and will be made available to Ecology upon request, or during the course of an inspection. The Permittees will provide copies of nonconformance documentation affecting any critical system to Ecology within five (5) working days after identification of the nonconformance. Ecology will review nonconformance documentation affecting a critical system and inform the Permittees in writing, within two (2) working days, whether a Permit modification is required for any nonconformance, and whether prior approval is required from Ecology before work proceeds, which affects the nonconforming item. If Ecology does not respond within two (2) working days, it will be deemed as acceptance and no Permit modification will be required.

II.L.2.d Upon completion of a construction project subject to this Permit, the Permittees will produce as-built drawings of the project which incorporate the design and construction modifications resulting from all project design change documentation and nonconformance documentation, as well as modifications made pursuant to WAC 173-303-830. The Permittees will place the drawings into the Operating Record within twelve (12) months of completing construction, or within an alternate period of time specified in a unit-specific Permit Condition in Part III or V of this Permit.

II.L.2.e Facility Compliance

The Permittees in receiving, storing, transferring, handling, treating, processing, and disposing of dangerous waste, will design, operate, and/or maintain the Facility in compliance with all applicable federal, state, and local laws and regulations.

## **II.M SECURITY**

The Permittees will comply with the security provisions of WAC 173-303-310. The Permittees may comply with the requirements of WAC 173-303-310(2) on a unit-by-unit basis.

## **II.N RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE**

### **II.N.1 Receipt of Off-Site Waste**

The Permittees will comply with Permit Conditions II.N.2 and II.N.3 for any dangerous wastes which are received from sources outside the United States, or from off-site generators.

### **II.N.2 Waste from Sources Outside the United States**

The Permittees will meet the requirements of WAC 173-303-290(1) for waste received from outside the United States.

### **II.N.3 Notice to Generator**

For waste received from off-site sources (except where the owner/operator is also the generator), the Permittees will inform the generator in writing that they have the appropriate Permits for, and will accept, the waste the generator is shipping, as required by WAC 173-303-290(3). The Permittees will keep a copy of this written notice as part of the TSD unit-specific Operating Record.

## **II.O GENERAL INSPECTION REQUIREMENTS**

The Permittees will inspect the Facility to prevent malfunctions and deterioration, operator errors, and discharges, which may cause or lead to the release of dangerous waste constituents to the environment, or threaten human health. Inspections must be conducted in accordance with the provisions of WAC 173-303-320(2). In addition to the TSD unit inspections specified in Parts III, V, and/or VI, the following inspections will also be conducted:

**II.O.1.a** The 100, 200 East, 200 West, 300, and 400 areas will be inspected annually.

**II.O.1.b** The Permittees will inspect the banks of the Columbia River, contained within the Facility boundary, once a year. The inspection will be performed from the river, by boat, and the inspectors will follow the criteria in Permit Condition II.O.1.c.

**II.O.1.c** The Permittees will visually inspect the areas identified in Permit Conditions II.O.1.a and II.O.1.b for malfunctions, deterioration, operator errors, and discharges which may cause or lead to the release of dangerous waste constituents to the environment, or that threaten human health. Specific items to be noted are as follows:

**II.O.1.c.i** Remains of waste containers, labels, or other waste management equipment;

**II.O.1.c.ii** Solid waste disposal sites not previously identified for remedial action;

**II.O.1.c.iii** Uncontrolled waste containers (e.g., orphan drums);

- 1 II.O.1.c.iv Temporary or permanent activities that could generate an uncontrolled waste form; and  
2 II.O.1.c.v Unpermitted waste discharges.
- 3 II.O.1.d The Permittees will notify Ecology at least seven (7) days prior to conducting these  
4 inspections in order to allow representatives of Ecology to be present during the  
5 inspections.
- 6 II.O.2 If the inspection by the Permittees, conducted pursuant to Permit Condition II.O.1., reveals  
7 any problems, the Permittees will take remedial action on a schedule agreed to by Ecology.
- 8 II.O.3 The inspection of high radiation areas will be addressed on a case-by-case basis in either  
9 Part III of this Permit, or prior to the inspections required in Permit Condition II.O.1.
- 10 **II.P MANIFEST SYSTEM**
- 11 II.P.1 The Permittees will comply with the manifest requirements of WAC 173-303-370 for  
12 waste received from off-site and WAC 173-303-180 for waste shipped off-site.
- 13 II.P.2 Transportation of dangerous wastes along roadways, if such routes are not closed to  
14 general public access at the time of transport, can be manifested pursuant to an alternate  
15 tracking system as allowed by WAC 173-303-180(6). The alternate tracking system can  
16 be a paper system or an electronic system. The roadways addressed by this condition are a  
17 public or private right-of-way within or along the border of contiguous property where the  
18 movement is under control of the USDOE. The alternate tracking system will consist of  
19 documentation between the offering Hanford Facility location and the receiving Hanford  
20 Facility location containing the following information:
- 21 II.P.2.a Hanford Facility offeror name, location, and telephone number;
- 22 II.P.2.b Hanford Facility receiver name, location, and telephone number;
- 23 II.P.2.c Description of waste;
- 24 II.P.2.d Number and type of containers;
- 25 II.P.2.e Total quantity of waste;
- 26 II.P.2.f Unit volume/weight;
- 27 II.P.2.g Dangerous waste number(s) or U.S. Department of Transportation hazard class; and
- 28 II.P.2.h Special handling instructions including emergency contacts.
- 29 II.P.3 The Hanford Facility offeror and receiver will resolve any discrepancies of information  
30 found related to Permit Conditions II.P.2.a through II.P.2.h.
- 31 II.P.4 If the discrepancies cannot be resolved at the Hanford Facility receiving location, a new  
32 Hanford Facility receiver location will be agreed upon, or the dangerous waste will be  
33 returned to the offeror location. The documentation accompanying the movement of  
34 dangerous waste will be updated to reflect the new receiving location.
- 35 **II.Q ON-SITE TRANSPORTATION**
- 36 II.Q.1 Documentation must accompany any on-site dangerous waste which is transported to or  
37 from any TSD unit subject to this Permit, through or within the 600 Area, unless the  
38 roadway is closed to general public access at the time of shipment. Waste transported by



1 rail or by pipeline is exempt from this Condition. This documentation will include the  
2 following information, unless other unit-specified provisions are designated in Part III or  
3 V of this Permit:

4 II.Q.1.a Generator's name, location, and telephone number;

5 II.Q.1.b Receiving TSD unit's name, location, and telephone number;

6 II.Q.1.c Description of waste;

7 II.Q.1.d Number and type of containers;

8 II.Q.1.e Total quantity of waste;

9 II.Q.1.f Unit volume/weight;

10 II.Q.1.g Dangerous waste number(s); and

11 II.Q.1.h Any special handling instructions.

12 II.Q.2 All non-containerized solid, dangerous waste transported to or from TSD units, subject to  
13 this Permit, will be covered to minimize the potential for material to escape during  
14 transport.

15 **II.R EQUIVALENT MATERIALS**

16 II.R.1 The Permittees may substitute an equivalent or superior product for any equipment or  
17 materials specified in this Permit. Use of equivalent or superior products will not be  
18 considered a modification of this Permit. A substitution will not be considered equivalent  
19 unless it is at least as effective as the original equipment or materials in protecting human  
20 health and the environment.

21 II.R.2 The Permittees will place in the Operating Record (within seven [7] days after the change  
22 is put into effect) the substitution documentation, accompanied by a narrative explanation,  
23 and the date the substitution became effective. Ecology may judge the soundness of the  
24 substitution.

25 II.R.3 If Ecology determines that a substitution was not equivalent to the original, it will notify  
26 the Permittees that the Permittees' claim of equivalency has been denied, of the reasons  
27 for the denial, and that the original material or equipment must be used. If the product  
28 substitution is denied, the Permittees will comply with the original approved product  
29 specification, or find an acceptable substitution.

30 **II.S LAND DISPOSAL RESTRICTIONS (LDR)**

31 Unless specifically identified otherwise in the HFFACO, the Permittees will comply with  
32 all LDR requirements as set forth in WAC 173-303-140.

33 **II.T ACCESS AND INFORMATION**

34 To the extent that work required by this Permit must be done on property not owned or  
35 controlled by the Permittees, the Permittees must utilize their best efforts to obtain access  
36 and information at these locations.

37 **II.U MAPPING OF UNDERGROUND PIPING**

38 II.U.1 Reserved.

39 II.U.2 Reserved.

II.U.3 The Permittees will maintain piping maps for existing, newly identified, and/or new dangerous waste underground pipelines (including active, inactive, and abandoned pipelines, which contain or contained dangerous waste subject to the provisions of Chapter 173-303 WAC) at the Hanford Facility. The maps will identify the origin, destination, direction of flow, size, depth and type (i.e., reinforced concrete, stainless steel, cast iron, etc.), of each pipe, and the location of their diversion boxes, valve pits, seal pots, catch tanks, receiver tanks, and pumps, and utilize Washington State Plane Coordinates, NAD 83(91), meters. If the type of pipe material is not documented on existing drawings, the most probable material type will be provided. The maps will also identify whether the pipe is active, inactive, or abandoned. The age of all pipes requiring identification pursuant to this Condition will be documented in an Attachment to the submittal. If the age cannot be documented, an estimate of the age of the pipe will be provided based upon best engineering judgment. These maps need not include the pipes within a fenced tank farm or within a building/structure. These maps will be compiled using documented QA/QC control methods and procedures outlined in DOE/RL-96-50, Hanford Facility RCRA Permit Mapping and Marking of Dangerous Waste Underground Pipelines Report, September 1996. These maps and any Attachments will be maintained in the Facility Operating Record and be updated annually as required by Permit Condition II.U.4.

II.U.4 Permittees will maintain current all maps required by Permit Condition II.U.3. These maps will be updated to incorporate new or revised information available by March 30th of each year. By September 30th of each year, the Permittees will submit to Ecology a list of maps that have been updated. The updated maps (including any Attachments) and the annual list submitted to Ecology will be maintained in the Facility Operating Record.

## II.V MARKING OF UNDERGROUND PIPING

The Permittees will maintain marking of underground pipelines located outside the 200 East, 200 West, 300, 400, 100N, and 100K Areas. These pipelines will be marked at the point they pass beneath an area fence, at their origin and destination, at any point they cross an improved road, and every 100 meters along the pipeline corridor where practicable. The markers will be labeled with a sign that reads "Buried Dangerous Waste Pipe" and will be visible from a distance of fifteen (15) meters.

## II.W OTHER PERMITS AND/OR APPROVALS

II.W.1 The Permittees will be responsible for obtaining all other applicable federal, state, and local permits authorizing the development and operation of the Facility. To the extent that work required by this Permit must be done under a permit and/or approval pursuant to other regulatory authority, the Permittees will use their best efforts to obtain such permits.

II.W.2 All other permits related to dangerous waste management activities are severable and enforceable through the permitting authority under which they are issued.

II.W.3 All air emissions from units subject to this Permit will comply with all applicable state and federal regulations pertaining to air emission controls, including but not limited to, Chapter 173-400 WAC, General Regulations for Air Pollution Sources; Chapter 173-460 WAC, Controls for New Sources of Toxic Air Pollutants; and Chapter 173-480 WAC, Ambient Air Quality Standards and Emission Limits for Radionuclides.

**II.X SCHEDULE EXTENSIONS**

II.X.1 The Permittees will notify Ecology in writing, as soon as possible, of any deviations or expected deviations, from the schedules of this Permit. The Permittees will include with the notification all information supporting their claim that they have used best efforts to meet the required schedules. If Ecology determines that the Permittees have made best efforts to meet the schedules of this Permit, Ecology will notify the Permittees in writing by certified mail, that the Permittees have been granted an extension. Such an extension will not require a Permit modification under Permit Condition I.C.3. Should Ecology determine that the Permittees have not made best efforts to meet the schedules of this Permit, Ecology may take such action as deemed necessary.

Copies of all correspondence regarding schedule extensions will be kept in the Operating Record.

II.X.2 Any schedule extension granted through the approved change control process identified in the HFFACO will be incorporated into this Permit. Such a revision will not require a Permit modification under Permit Condition I.C.3.

**II.Y CORRECTIVE ACTION**

In accordance with WAC 173-303-646 and WAC 173-303-815(2)(b)(ii), the Permittee must conduct corrective action, as necessary to protect human health and the environment, for releases of dangerous waste and dangerous constituents from solid waste management units and areas of concern at the facility, including releases that have migrated beyond the facility boundary. The Permittee may be required to implement measures within the facility to address releases, which have migrated beyond the facility's boundary. As specified in Permit Conditions II.Y.1.g, II.Y.2.a.iii and II.Y.a.ii, the Permittee's right to challenge Ecology's authority to impose corrective action with respect to radionuclides, CERCLA Past Practice (CPP) Units (as identified under Permit Condition II.Y.2.a.) and selected solid waste management units not covered by the HFFACO at property currently subleased to US Ecology, Inc. (as identified under Permit Condition II.Y.3.a.i.), is reserved until such time as Ecology chooses to impose corrective action in accordance with the Permit modification procedures of WAC 173-303-830.

**II.Y.1 Compliance with Chapter 173-340 WAC**

In accordance with WAC 173-303-646, the Permittee must conduct corrective action "as necessary to protect human health and the environment". To ensure that corrective action will be conducted as necessary to protect human health and the environment, except as provided in Permit Condition II.Y.2, the Permittee must conduct corrective action in a manner that complies with the following provisions of Chapter 173-340 WAC:

II.Y.1.a As necessary to select a cleanup action in accordance with WAC 173-340-360 and WAC 173-340-350 State Remedial Investigation and Feasibility Study;

II.Y.1.b WAC 173-340-360 Selection of Cleanup Actions;

II.Y.1.c WAC 173-340-400 Cleanup Actions;

II.Y.1.d WAC 173-340-410 Compliance Monitoring Requirements;

II.Y.1.e WAC 173-340-420 Periodic Site Reviews;

II.Y.1.f WAC 173-340-440 Institutional Controls; and

- II.Y.1.g WAC 173-340-700 through -760 Cleanup Standards, except that to the extent that Ecology seeks to impose corrective action with respect to radionuclides regulated under the provisions of the Atomic Energy Act, as amended, 42 U.S.C. § 2011 et seq (AEA), the Permittee may challenge Ecology's authority to impose such corrective action through a timely appeal of the permit modification issued by Ecology without argument from Ecology that such right has been waived by a failure to fully litigate that issue through an appeal taken within thirty (30) days of the issuance of this permit, and without argument from the Permittee that such requirement fails to satisfy a cause for Permit modification under WAC 173-303-830(3)(a).
- II.Y.2 Acceptance of Work Under Other Authorities or Programs and Integration with the HFFACO.
- Corrective action is necessary to protect human health and the environment for all units identified in Appendix B and Appendix C of the HFFACO. Notwithstanding Permit Condition II.Y.1, work under other cleanup authorities or programs, including work under the HFFACO, may be used to satisfy corrective action requirements, provided it protects human health and the environment.
- II.Y.2.a For units identified in Appendix C of the FFAOC, as amended, as CERCLA Past Practice (CPP) Units, Ecology accepts work under the HFFACO, as amended, and under the CERCLA program, as satisfying corrective action requirements to the extent provided for in, and subject to the reservations and requirements of, Permit Conditions II.Y.2.a.i through II.Y.2.a.iv.
- II.Y.2.a.i For any unit identified in Appendix C of the HFFACO as a CPP unit, the Permittee must comply with the requirements and schedules related to investigation and cleanup of the CPP unit(s) developed and approved under the HFFACO, as amended. The requirements and schedules related to investigation and cleanup of CPP units currently in place under the HFFACO, as amended, and in the future developed and approved under the FFAOC, as amended, are incorporated into this Permit by this reference and apply under this Permit as if they were fully set forth herein. If the Permittee is not in compliance with requirements of the HFFACO, as amended, that relate to investigation or cleanup of CPP unit(s), Ecology may take action to independently enforce the requirements as corrective action requirements under this Permit.
- II.Y.2.a.ii For any unit identified in Appendix C of the HFFACO as a CPP unit, in the case of an interim ROD, a final decision about satisfaction of corrective action requirements will be made in the context of issuance of a final ROD.
- II.Y.2.a.iii If EPA and Ecology, after exhausting the dispute resolution process under Section XXVI of the HFFACO, cannot agree on requirements related to investigation or cleanup of CPP unit(s), Ecology will notify the Permittee, in writing, of the disagreement and impose, in accordance with the Permit Modification Procedures of WAC 173-303-830, a requirement for the Permittee to conduct corrective action for the subject units(s) in accordance with Permit Condition II.Y.1. The Permittee may challenge Ecology's authority to impose such corrective action requirements through a timely appeal of such permit modification, without argument from Ecology that the Permittee's right to raise such challenge has been waived by a failure to fully litigate that issue through an appeal taken within thirty (30) days of the issuance of this permit, and without argument from the Permittee that such requirement fails to satisfy a cause for Permit modification under WAC 173-303-830(3)(a). Within sixty (60) days of receipt of the above permit

modification, or within some other reasonable period of time agreed to by Ecology and the Permittee, the Permittee must submit for Ecology review and approval, a plan to conduct corrective action in accordance with Permit Condition II.Y.1 for the subject unit(s). The Permittee's plan may include a request that Ecology evaluate work under another authority or program. Approved corrective action plans under this Condition will be incorporated into this Permit in accordance with the Permit Modification Procedures of WAC 173-303-830.

II.Y.2.a.iv The Permittee must maintain information on corrective action for CPP units covered by the HFFACO in accordance with Sections 9.0 and 10.0 of the HFFACO Action Plan. In addition, the Permittee must maintain all reports and other information developed in whole, or in part, to implement the requirements of Permit Condition II.Y.2.a, including reports of investigations and all raw data, in the Facility Operating Record in accordance with Permit Condition II.I. Information that is maintained in the Hanford Site Administrative Record may be incorporated by reference into the Facility Operating Record.

II.Y.2.b For units identified in Appendix C of the HFFACO, as amended, as RPP units, Ecology accepts work under the HFFACO, as amended, as satisfying corrective action requirements to the extent provided for, and subject to the reservations and requirements of, Permit Conditions II.Y.2.b.i through II.Y.2.b.iv.

II.Y.2.b.i For any unit identified in Appendix C of the HFFACO, as amended, as RPP unit, until a Permit modification is complete under Permit Condition II.Y.2.b.iii., the Permittee must comply with the requirements and schedules related to investigation and cleanup of RPP units developed and approved under the HFFACO, as amended. The requirements and schedules related to investigation and cleanup of RPP units currently in place under the HFFACO, as amended, and in the future developed and approved under the HFFACO, as amended, are incorporated into this Permit by this reference and apply under this Permit as if they were fully set forth herein. Until a permit modification is complete under Permit Condition II.Y.2.b.iii., if the Permittee is not in compliance with requirements and schedules related to investigation and cleanup of RPP units developed and approved under the HFFACO, as amended, Ecology may take action to independently enforce the requirements as corrective action requirements under this Permit.

II.Y.2.b.ii When the Permittee submits a corrective measures study for an individual RPP unit or a group of RPP units, the Permittee must, at the same time, recommend a remedy for the unit(s). The remedy recommendation must contain all the elements of a draft cleanup action plan under WAC 173-340-360(10).

II.Y.2.b.iii After considering the Permittees' corrective measures study and remedy recommendation, Ecology will make a tentative remedy selection decision and publish the decision for public review and comment. Public review and comment may be accomplished by publishing the tentative decision as a draft Permit under WAC 173-303-840(10), or by a method that provides an equivalent opportunity for public review and participation. Following public review and comment, Ecology will make a final remedy selection decision. Final remedy decisions will be incorporated into the Permit using the Permit Modification Procedures of WAC 173-303-830.

II.Y.2.b.iv The Permittee must maintain information on corrective action for RPP units covered by the HFFACO, as amended, in accordance with Sections 9.0 and 10.0 of the HFFACO Action Plan. In addition, the Permittee must maintain all reports and other information

- 1 developed in whole, or in part, to implement the requirements of Permit  
2 Condition II.Y.2.b, including reports of investigations and all raw data, in the Facility  
3 Operating Record in accordance with Permit Condition II.I. Information that is maintained  
4 in the Hanford Site Administrative Record may be incorporated into the Facility Operating  
5 Record by reference.
- 6 II.Y.2.c For each TSD unit or group of units, when the Permittee submits a certification of closure  
7 or a certification of completion of post-closure care, or at an earlier time agreed to by  
8 Ecology and the Permittee, the Permittee must, at the same time, either:
- 9 II.Y.2.c.i Document that the activities completed under closure and/or post-closure satisfy the  
10 requirements for corrective action; or
- 11 II.Y.2.c.ii If the activities completed under closure and/or post-closure care do not satisfy corrective  
12 action requirements, identify the remaining corrective action requirements and the  
13 schedule under which they will be satisfied, if remaining corrective action requirements  
14 will be satisfied by work developed and carried out under the HFFACO provisions for  
15 RPP units or CPP units, a reference to the appropriate RPP or CPP process and schedule  
16 will suffice.
- 17 II.Y.2.c.iii Ecology will make final decisions as to whether the work completed under closure and/or  
18 post-closure care satisfies corrective action, specify any unit-specific corrective action  
19 requirements, and incorporate the decision into this Permit in accordance with the Permit  
20 Modification Procedures of WAC 173-303-830.
- 21 II.Y.2.d Notwithstanding any other condition in this Permit, Ecology may directly exercise any  
22 administrative or judicial remedy under the following circumstances:
- 23 II.Y.2.d.i Any discharge or release of dangerous waste, or dangerous constituents, which are not  
24 addressed by the HFFACO, as amended;
- 25 II.Y.2.d.ii Discovery of new information regarding dangerous constituents or dangerous waste  
26 management, including but not limited to, information about releases of dangerous waste  
27 or dangerous constituents which are not addressed under the HFFACO, as amended; or
- 28 II.Y.2.d.iii A determination that action beyond the terms of the HFFACO, as amended, is necessary to  
29 abate an imminent and substantial endangerment to the public health, or welfare, or to the  
30 environment.
- 31 II.Y.3 Releases of Dangerous Waste or Dangerous Constituents Not Covered By the HFFACO
- 32 II.Y.3.a US Ecology
- 33 II.Y.3.a.i The following solid waste management units are not covered by the HFFACO:  
34 A. US Ecology, Inc., SWMU 1: Chemical Trench;  
35 B. US Ecology, Inc., SWMU 2-13: Low-level radioactive waste trenches 1 through 11A;  
36 and  
37 C. US Ecology, Inc., SWMU 17: Underground resin tank.
- 38 II.Y.3.a.ii Selected solid waste management units identified in Permit Condition II.Y.3.a.i are  
39 currently being investigated by US Ecology in accordance with the *Comprehensive*  
40 *Investigation US Ecology – Hanford Operations Workplan*. Following completion of this  
41 investigation and any closure required of such solid waste management unit under the  
42 authority of the Washington State Department of Health, or within one (1) year of the

effective date of this Permit Condition, whichever is earlier, Ecology will make a tentative decision as to whether additional investigation or cleanup is necessary to protect human health or the environment for the solid waste management units identified in Permit Condition II.Y.3.a.i, and publish that decision as a draft permit in accordance with WAC 173-303-840(10). Following the associated public comment period, and consideration of any public comments received during the public comment period, Ecology will publish as final permit conditions under WAC 173-303-840(8) either:

- A. a decision that corrective action is not necessary to protect human health or the environment;
- B. an extension to the schedule established under Permit Condition II.I.Y.3.a.ii; or
- C. a decision that corrective action in accordance with Permit Condition II.Y.1 is necessary to protect human health or the environment.

II.Y.3.a.iii If Ecology decides under Permit Condition II.Y.3.a.ii that corrective action is necessary to protect human health or the environment, the Permittee may challenge Ecology's authority to impose such corrective action requirements through a timely appeal of such permit modification, without argument from Ecology that the right to raise such challenge has been waived by a failure to fully litigate that issue through an appeal taken within thirty (30) days of the issuance of this permit, and with argument from the Permittee that such requirement fails to satisfy a cause for permit modification under WAC 173-303-830(3)(a). Within one hundred and eighty (180) days of receipt of the above Permit modification, the Permittee must submit, for Ecology review and approval, a plan to conduct corrective action in accordance with Permit Condition II.Y.1. Approved corrective action plans under this condition will be incorporated into this Permit in accordance with the Permit Modification Procedures of WAC 173-303-830.

II.Y.3.b Newly Identified Solid Waste Management Units and Newly Identified Releases of Dangerous Waste or Dangerous Constituents.

The Permittee must notify Ecology of all newly-identified solid waste management units and all newly-identified areas of concern at the Facility. For purposes of this condition, a 'newly-identified' solid waste management unit or a 'newly-identified' area of concern is a unit or area not identified in the HFFACO, as amended, on the effective date of this condition and not identified by Permit Condition II.Y.3.a. Notification to Ecology must be in writing and must include, for each newly-identified unit or area, the information required by WAC 173-303-806(4)(a)(xxiii) and WAC 173-303-806(4)(a)(xxiv). Notification to Ecology must occur at least once every calendar year, in January, and must include all units and areas newly identified since the last notification, except that if a newly identified unit or area may present an imminent and substantial endangerment to human health or the environment, notification must occur within five (5) days of identification of the unit or area. If information required by WAC 173-303-806(4)(a)(xxiii) or WAC 173-303-806(4)(a)(xxiv) is already included in the Waste Information Data System, it may be incorporated by reference into the required notification.

## II.Z WASTE MINIMIZATION

II.Z.1 In accordance with WAC 173-303-380(1)(q), and Section 3005(h) of RCRA, 42 U.S.C. 6925(h), the Permittee must place a certification in the Hanford Facility Operating Record, Unit-Specific Files on an annual basis that:

II.Z.1.a A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and,

II.Z.1.b The proposed method of treatment, storage or disposal is that practicable method currently available to the Permittee, which minimizes the present and future threat to human health and the environment.

II.Z.2 The Permittee will maintain each such certification of waste minimization in the operating record as required by Permit Condition II.I.1.

**II.AA AIR EMISSION STANDARDS FOR PROCESS VENTS**

The Permittees will comply with applicable requirements of WAC 173-303-690 (40 CFR 264, Subpart AA) for process vents associated with Part III units performing specific separations processes unless exempted by WAC 173-303-690(1)(d). Threshold limits applied to process vents potentially requiring emission controls subject to WAC 173-303-690 are evaluated based on the summation of applicable emission sources for the entire Hanford Facility. When the summed emissions fall below threshold limits in 40 CFR 264.1032(a)(1), no emission control devices are required. If threshold limits in 40 CFR 264.1032(a)(1) are predicted to be exceeded, the Permittees will notify Ecology to determine the appropriate course of action. Unit-specific information is contained in Part III of the Permit for applicable units.

**II.BB AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS**

The Permittees will comply with applicable requirements of WAC 173-303-691 (40 CFR 264, Subpart BB) for certain equipment leaks associated with Part III units unless exempted by WAC 173-303-691(1)(e) or (f) and identified in accordance with 40 CFR 264.1064(g)(5) or (6). Air emission standards apply to equipment that contacts or contains hazardous wastes with organic concentrations of at least 10 percent by weight. Unit-specific information is contained in Part III of the Permit for applicable units.

**II.CC AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS**

The Permittees shall comply with applicable requirements of WAC 173-303-692 (40 CFR 264, Subpart CC) for containers, tanks, and surface impoundment areas associated with Part III units unless exempted by WAC 173-303-692(1)(b). Unit-specific information is contained in Part III of the Permit for applicable units.



**PART III - UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS**

**CHAPTER 1**

**616 Nonradioactive Dangerous Waste Storage Facility  
(Clean Closed, September 5, 2001)**

The 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF) was an active storage unit for dangerous wastes that are shipped to off-site commercial treatment or disposal facilities.

This TSD unit was clean closed September 5, 2001, in accordance with the approved Closure Plan contained in Permit Attachment 8, which was retired during Revision 6 of this Permit.

**CHAPTER 2**

**305-B Storage Facility**

The 305-B Storage Facility (305-B) is an active storage unit for dangerous wastes and mixed wastes. These wastes are derived primarily from research and development activities and laboratory activities in the 300 Area. This Chapter sets forth the operating Conditions for this TSD unit.

**III.2.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION**

The Permittees shall comply with all the requirements set forth in Permit Attachment 18, including all Class 1 modifications specified below, and the Amendments specified in Permit Condition III.2.B. Enforceable portions of the permit application have been incorporated in Permit Attachment 18 and are identified as follows. All subsections, figures, and tables included in these portions are also enforceable, unless stated otherwise:

**PERMIT ATTACHMENT 18:**

- |              |  |
|--------------|--|
| Chapter 1.0  | Part A Dangerous Waste Permit, Revision 3, from Class 1 modification dated June 30, 2006 |
| Chapter 2.0  | Unit Description, from Class 1 modification dated March 31, 2005                         |
| Chapter 3.0  | Waste Analysis Plan, from Class 1 modification dated March 31, 2005                      |
| Chapter 4.0  | Process Information, from Class 1 modification dated December 31, 2003                   |
| Chapter 6.0  | Procedures to Prevent Hazards, from Class 1 modification dated March 31, 2005            |
| Chapter 7.0  | Building Emergency Procedure, from Class 1 modification dated June 30, 2006              |
| Chapter 8.0  | Personnel Training, from Class 1 modification dated September 30, 2003                   |
| Chapter 11.0 | Closure and Post-Closure Requirements, from Class 1 modification dated June 30, 2006     |
| Chapter 12.0 | Reporting and Recordkeeping, from Class 1 modification dated August 2004                 |
| Chapter 13.0 | Other Relevant Laws, from Class 1 modification dated August 2004                         |

**III.2.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

- III.2.B.1 For all shipments of dangerous waste to or from this TSD unit, except for shipments which occur wholly within the 300 Area, the Permittees shall comply with Permit Conditions II.P and II.Q of this Permit regarding dangerous waste shipment manifesting and transportation.

**CHAPTER 3**

**PUREX Storage Tunnels**

The PUREX Storage Tunnels are mixed waste storage units consisting of two underground railroad tunnels: Tunnel Number 1, designated 218-E-14, and Tunnel Number 2, designated 218-E-15. This Chapter sets forth the operating Conditions for this TSD unit.

**III.3.A        COMPLIANCE WITH APPROVED PERMIT APPLICATION**

The Permittees shall comply with all requirements set forth in Permit Attachment 28, including all Class 1 modifications, and the Amendments specified in Permit Condition III.3.B, if any exist. All subsections, figures, and tables included in these portions are enforceable.

**PERMIT ATTACHMENT 28:**

- Chapter 1.0        Part A Dangerous Waste Permit, Revision 6, from Class 1 modification dated May 2005
- Chapter 2.0        Unit Description, from Class 1 modification dated May 2005
- Chapter 3.0        Waste Analysis Plan, from Class 1 modification dated September 30, 2004
- Chapter 4.0        Process Information, from Class 1 modification dated August 2004
- Chapter 6.0        Procedures to Prevent Hazards, from Class 1 modification dated August 2004
- Chapter 7.0        Contingency Plan, dated May 1998, from Class 1 modification dated December 31, 2005
- Chapter 8.0        Personnel Training, from Class 1 modification dated September 30, 2002
- Chapter 10.0       Waste Minimization, from Class 1 modification dated September 30, 2002
- Chapter 11.0       Closure and Financial Assurance, from Class 1 modification dated August 2004
- Chapter 12.0       Reporting and Recordkeeping, from Class 1 modification dated August 2004
- Chapter 13.0       Other Federal and State Laws, from Class 1 modification dated August 2004

**III.3.B        AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

(None Required)

1 **CHAPTER 4**

2 **Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility**

3 This Chapter sets forth the operating Conditions for the Liquid Effluent Retention Facility (LERF) and  
4 the Effluent Treatment Facility (ETF).

5 **III.4.A COMPLIANCE WITH APPROVED PERMIT APPLICATION**

6 The Permittees shall comply with all requirements set forth in Permit Attachment 34, including the  
7 Amendments specified in Permit Condition III.4.B, if any exist. Enforceable portions of the application  
8 are listed below; all subsections, figures, and tables included in these portions are also enforceable,  
9 unless stated otherwise:

10 **PERMIT ATTACHMENT 34:**

11 Chapter 1.0 Part A Dangerous Waste Permit, Revision 0, from Class 1 modification dated May 2005

12 Chapter 2.0 Unit Description from Class 1 modification dated March 2003

13 Chapter 3.0 Waste Analysis Plan, from Class 1 modification dated August 2004

14 Chapter 4.0 Process Information, from Class 1 modification dated December 31, 2004

15 Chapter 5.0 Ground Water Monitoring (PNNL-11620 and WHC-SD-EN-AP-024), from Class 1  
16 modification dated March 2003

17 Chapter 6.0 Procedures to Prevent Hazards, from Class 1 modification dated December 31, 2003

18 Chapter 7.0 Contingency Plan, from Class 1 modification dated August 2004

19 Chapter 8.0 Personnel Training, from Class 1 modification dated March 2003

20 Chapter 11.0 Closure and Financial Assurance, from Class 1 modification dated June 30, 2005

21 Chapter 12.0 Reporting and Recordkeeping, from Class 1 modification dated August 2004

22 Chapter 13.0 Other Federal and State Laws, from Class 1 modification dated August 2004

23 **III.4.B. AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

24 III.4.B.1. Interim status Groundwater Monitoring Plan for the 200 East Area Liquid Effluent  
25 Treatment Facility, WHC-SD-EN-AP-024

**CHAPTER 5**

**242-A Evaporator**

The 242-A Evaporator is a mixed waste treatment and storage unit consisting of a conventional forced-circulation, vacuum evaporation system to concentrate mixed-waste solutions. This Chapter sets forth the operating Conditions for this TSD unit.

**III.5.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION**

The Permittees shall comply with all requirements set forth in Permit Attachment 35, including all Class 1 modification, and the Amendments specified in Permit Condition III.5.B, if any exist. All subsections, figures, and tables included in these portions are enforceable):

**PERMIT ATTACHMENT 35:**

Chapter 1.0	Part A Dangerous Waste Permit, Revision 9, from Class 1 modification dated May 2005
Chapter 2.0	Unit Description, from Class 1 modification dated August 2004
Chapter 3.0	Waste Analysis Plan, from Class 1 modification dated December 31, 2005
Chapter 4.0	Process Information, from Class 1 modification dated December 31, 2005
Chapter 6.0	Procedures to Prevent Hazards, from Class 1 modification dated December 31, 2005
Chapter 7.0	Contingency Plan, from Class 1 modification dated June 30, 2004
Chapter 8.0	Personnel Training, from Class 1 modification dated December 31, 2002
Chapter 11.0	Closure and Financial Assurance, from Class 1 modification dated December 31, 2005
Chapter 12.0	Reporting and Recordkeeping, from Class 1 modification dated August 2004
Chapter 13.0	Other Federal and State Laws, from Class 1 modification dated August 2004
Appendix 4B	The 242-A Evaporator/Crystallizer Tank System Integrity Assessment Report, from Class 1 modification dated December 31, 2002

**III.5.B AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

III.5.B.1 Portions of DOE/RL-94-02 that are not made enforceable by inclusion in the applicability matrix for that document, are not made enforceable by reference in this document.

**CHAPTER 6**

**325 Hazardous Waste Treatment Units**

The 325 Hazardous Waste Treatment Units (325 HWTUs) consist of the Shielded Analytical Laboratory (SAL) which includes Rooms 32, 200, 201, 202, and 203; and the Hazardous Waste Treatment Unit (HWTU) encompassing Rooms 520, 524 and 528 of the 325 Building.

**III.6.A. COMPLIANCE WITH APPROVED PERMIT APPLICATION**

The Permittees shall comply with all requirements set forth in Permit Attachment 36, including the Amendments specified in Permit Condition III.6.B. All subsections, figures, and tables included in these portions are enforceable.

**PERMIT ATTACHMENT 36:**

Chapter 1.0 Part A Dangerous Waste Permit, Revision 5, from Class 1 modification dated May 2005

Chapter 2.0 Unit Description, from Class 1 modification dated June 30, 2005

Chapter 3.0 Waste Analysis Plan, from Class 1 modification dated June 30, 2005

Chapter 4.0 Process Information, from Class 1 modification dated June 30, 2005

Chapter 6.0 Procedures to Prevent Hazards, from Class 1 modification dated June 30, 2005

Chapter 7.0 Contingency Plan, from Class 1 modification dated June 30, 2005

Chapter 8.0 Personnel Training, from Class 1 modification dated September 30, 2003

Chapter 11.0 Closure and Financial Assurance, from Class 1 modification dated August 2004

Chapter 12.0 Reporting and Recordkeeping, from Class 1 modification dated August 2004

Chapter 13.0 Other Federal and State Laws, from Class 1 modification dated August 2004

**III.6.B AMENDMENTS TO THE APPROVED PERMIT APPLICATION**

III.6.B.1 Portions of DOE/RL-94-02 that are not made enforceable by inclusion in the applicability matrix for that document, are not made enforceable by reference in this document.